

Charles Sanders Peirce

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INTRODUCTION

This paper is a discussion of certain ideas of Charles Sanders Peirce. Peirce was a scientist, expert in the construction of scientific instruments, logician, mathematician, philosopher, and originator of semiotics (the study of signs). More revered internationally than locally in his day, Peirce has been the subject of growing interest in recent decades. I will concentrate on his philosophical ideas, although I will here and there be bumping up against his other specialties. There are any number of possible entry points to Peirce's philosophy which might be chosen, but, illustrative of his principle of *synechism* or continuity, no matter where we start we will eventually connect with his whole vision.

Peirce developed an architectonic theory of cosmos, mind, and signs, explaining the commonality of physical, psychical, and semiotic phenomena. He believed that theories, generals, and paradigms shape the future and give rise to reactions to themselves. His was a unified theory of all that gives cosmic significance to human behavior (Sherrif 1994, pp. 18-19).

Because of our interest in theory, I decided to begin with Peirce's discussion of how we come to form theories that explain the constitution of things. This will eventually take us to Peirce's cosmology and a remarkably cogent bottom-up view of the emergence and development of the universe, a view which has at its center the belief that mind constitutes the very fabric of the real. Although this metaphysical view provides a solid platform for a solution to the mind-body problem, for Peirce that question is secondary to the core concept that the world is in its very essence meaningful, a profusion of signs that constitutes and makes intelligible every existing thing (CP 4.55).

This paper is necessarily limited in scope. It cannot adequately deal with all the questions that naturally arise concerning the relationship between Peirce's ideas and our search for a theory of rogue phenomena and survival. It is meant, rather, to provide enough information about his overall vision to usefully formulate such questions.

A preliminary note: You will find this paper liberally stocked with direct quotations from Peirce. This may well not be considered good academic form, but I do it for two reasons. One is that Peirce's works are not all that well known yet and probably not sitting on the shelves of the majority of people who will read this paper for ready reference. The second, and most important in my mind, is to give the reader a feeling of the style and way of thinking of this remarkable mind. I cannot think of a better way to get a sense of the man than through his own words.

ELEMENTS OF A PEIRCEAN VIEW OF THE WORLD

1. Peirce's commandment in regard to the investigation of reality: Do not block the road to inquiry! Everything has intelligibility built into it. There are no fundamental unknowables that will have to remain forever a mystery. In other words, there is no unattainable and inconceivable thing-in-itself.
2. We develop our knowledge of the world—whether common sense or scientific—through three types of inference: deduction, induction, and abduction.
3. There are three basic phenomenological categories that apply to all that exists: Firstness, Secondness and Thirdness.
4. It is possible to develop reasonable hypotheses about the origin of the universe. These hypotheses must be such that they can account for the world as we know it. These hypotheses should be able to indicate some verifiable evidence of what is and is not possible in our world.
5. All is mind. Reality and logic operate according to the same laws.
6. All things exhibit the features of both Freedom/Chance/Spontaneity and regularity or the tendency for habit-taking.
7. Matter is mind hidebound by habit.
8. Everything evolves.
9. Physical laws evolve and the currently operative laws are simply one phase in that evolution.
10. All laws are fallible, that is, more or less correct for the time being, but never absolutely true.
11. Peirce calls his philosophy *objective idealism*. This indicates that the only thing that can be called real is what appears in experience. But what appears in experience is what it is regardless of that experience; this is a *realism* that indicates that reality is independent of thought in general, and that our experiences are determined by that which we experience.
12. The world is a profusion of signs.
13. Human personality is a creative, evolving sign.
14. The world evolves with an intrinsic teleology; final causes are evident in all that happens.

Most of these elements will be touched on in this paper. In the meantime I will start with the issue of how we can form workable theories about the nature of things.

SUCCESSFUL GUESSING

Charles Peirce was first of all a scientist and secondly a scientist's philosopher. He wondered what it is that scientists do and how it is that science works. He believed there is one crucial issue at the heart of the matter:

According to Kant, the central question of philosophy is 'How are synthetical judgments *a priori* possible?' But antecedently to this comes the question how synthetical judgments in general, and still more generally, how synthetical reasoning is possible at all. When the answer to the general problem has been obtained, the particular one will be comparatively simple. This is the lock upon the door of philosophy. (CP 5.348)

Synthetic judgments are judgments about things of which we have no direct experience but which add something new to our knowledge. Peirce said that the answer to the question of how synthetic judgments are possible is that "whatever is universally true is involved in the conditions of experience" (EP 1: p. 168). This answer lies at the very foundation of all understanding. So here is the question: How is it that, given exposure to a certain set of facts, we can form correct theories about the way nature must be to produce those facts? Peirce put it this way:

The surprising fact, C, is observed
But if A were true, C would be a matter of course,
Hence, there is reason to suspect that A is true. (CP 5.189)

A is a hypothesis, a guess about the nature of the underlying reality, one that can be tested by observing further facts. But why is it that both in ordinary life situations and in scientific investigations, we quickly arrive at hypotheses that are so close to the truth?

Peirce calls this guessing *abduction*, which he defines as the process of forming an explanatory hypothesis. There are three kinds of reasoning, he says: induction, deduction, and abduction. Deduction starts with a given hypothesis and reaches conclusions about what flows from that hypothesis. It is ideal, in the sense that it says nothing about the truth or falsity of the hypothesis. It simply makes explicit the implications contained within the hypothesis. Induction is the experimental testing of a hypothesis. It sets out with a hypothesis and measures the degree of concordance of fact with that hypothesis. According to Peirce, neither deduction nor induction originate any fundamentally new knowledge in science; only abduction can do that: "Every single item of scientific theory which stands established today has been due to Abduction" (CP 5.172).

Abduction involves the *play of musement* in which ideas are associated in a new synthesis. Peirce says to the scientific investigator that he should develop this state as a means ready at hand to help him move beyond the merely given to what might constitute a solution to the question posed by the facts encountered. For him musement is a state of mind which entails being as it were abstracted from time, a kind of space between past and future in which the "three universes of experience pass before our eyes." (We will delve more deeply into the three universes, or three basic phenomenological categories, later, but for now let me just say: the first universe shows mere

qualities in their diversity, the second, the existence of things in their particularity; and the third, that aspect of ordering permanence and regularity of the qualities in the things, through the relations between the two other universes.) In musement the mind is out of gear, is not trying to accomplish some particular purpose, but unconditionally contemplates a free flow of ideas. It is *pure play*, which opens itself to a continuum of possibilities (CP 6.452-466, see Ibri 2008, pp 91-92).

Why does Peirce suggest such an approach to the development of hypotheses and theories? Well, the fact is there are no rules for their invention, and that makes the whole process quite magical. Peirce holds it an undeniable truth about the successful formulation of a hypothesis that “man’s mind must have been attuned to the truth of things in order to discover what he has discovered” (CP 6.476). He is not alone in this view, for “Galileo appeals to *il lume naturale* [natural light] at the most critical stages of his reasoning. Kepler, Gilbert, and Harvey—not to speak of Copernicus—substantially rely upon an inward power...supplying an essential factor to the influences carrying their minds to the truth” (CP 1.80).

Peirce does not offer this idea as psychology, but as a conclusion derived from his evolutionary metaphysics:

If the universe conforms, with any approach to accuracy, to certain highly pervasive laws, and if man’s mind has been developed under the influence of those laws, it is to be expected that he should have a natural light or light of nature, or instinctive insight, or genius, tending to make him guess those laws aright, or nearly aright. This conclusion is confirmed when we find that every species of animal is endowed with a similar genius. (CP 5.604)

Our faculty of guessing corresponds to a bird’s musical and aeronautic powers; that is, it is to us, as those are to them, the loftiest of our merely instinctive powers. I suppose that if one were sure of being able to discriminate between the intimations of this instinct and the self-flatteries of personal desire, one would always trust to the former. For I should not rate high either the wisdom or the courage of a fledgling bird, if, when the proper time had come, the little agnostic should hesitate long to take his leap from the nest on account of doubts about the theory of aerodynamics. (CP 7.48)

We very much need this instinct, says Peirce. Without it we could have made no real progress in developing theories, and science would be next to impossible. We so take this ability for granted that we hardly notice how remarkable it is. Peirce gives us an example:

A chemist notices a surprising phenomenon. Now if he has a high admiration for Mill’s Logic, as many chemists have, he will remember that Mill tells him that he must work on the principle that, under precisely the same circumstances, like phenomena are produced. Why does he then not note that this phenomenon was produced on such a day of the week, the planets presenting a certain configuration, his daughter having on a blue dress, he having dreamed of a white horse the night before, the milkman having been late that morning, and so on? The answer will be that in early days chemist’s did use to attend to some such circumstances, but that they have learned better. How have they learned this? By an

induction. Very well, that induction must have been based on a theory which the induction verified. How was it that man was ever led to entertain that true theory? You cannot say that it happened by chance, because the possible theories if not strictly innumerable, at any rate exceed a trillion—or the third power of a million; and therefore the chances are too overwhelmingly against the single true theory in the twenty or thirty thousand years during which man has been a thinking animal, ever having come into any man's head. Besides, you cannot seriously think that every little chicken that is hatched, has to rummage through all possible theories until it lights upon the good idea of picking up something and eating it. On the contrary, you think the chicken has an innate idea of doing this; that is to say, that it can think of this, but has no faculty of thinking anything else. The chicken you say pecks by instinct. But if you are going to think every poor chicken endowed with an innate tendency toward a positive truth, why should you think that to man alone this gift is denied? (CP 5.591)

So, says Peirce, when it comes to the production of theories, we should cultivate *instinct*. When puzzling over a particular set of data, the scientist should pay attention to impulses that occur to him, follow through on them, and find a way to pose the question to nature to see whether experiment or observation supports or rejects the hypothesis. The impulse to adopt a particular solution is an indicator of the action of an instinctive faculty that is a powerful rudder guiding the investigator to the correct path.

PRAGMATISM

Pragmatism is an approach to truth which was made popular in the writings of William James and which still has a strong influence on philosophical thought today. It is well known that James was not the originator of this doctrine and he freely gave that credit to Peirce. It is also a matter of common knowledge that Peirce believed that James's formulation of pragmatism was defective and said so in no uncertain terms. What is much less widely known is that for Peirce pragmatism was intimately connected with abduction and of one piece with his core ideas about scientific thinking.

According to Peirce, if you want to come to the meaning or truth of something: "Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then our conception of these effects is the whole of our conception of the object" (CP 5.2). This is Peirce's "pragmatic axiom." So Pragmatism means that if a conception is true it must have palpable consequences, "either in the shape of conduct to be recommended, or that of experiences to be expected" (CP 5.2).

Peirce said, "The question of Pragmatism is the question of Abduction" (CP 5.197):

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 5.197)

We are able to deal with the world around us by forming beliefs about what it is like. Beliefs are opinions on which we are prepared to act. We want to “avoid all surprise,” that is, possess beliefs that let us accurately anticipate what will actually happen when we take action. If a belief fails and things happen that we are not expecting—if we are surprised—we are thrown into a state of doubt. We then try to establish a new belief, one that produces expectations that will pan out.

Here pragmatism and abduction travel the same road. Whether in science or in life, we are sometimes “surprised” by a fact we encounter. The old belief, the old hypothesis, has let us down and must be trashed. It has lost all of its pragmatic value. We are now in a state of doubt. We can only find rest when we have a new, more useful belief to replace the failed one. We are quite good at coming up with better hypotheses and therefore more stable beliefs because of that *instinct* to guess right, that *lume naturale* that is our evolutionary heritage.

How did it happen that we have this instinct for right guessing? What is the basis for such an innate capacity? Peirce’s answer is definite. He bases his justification on his evolutionary metaphysics and his fundamental notion of a *continuum* that embraces all existing things. But to see how that is so, we first have to go back to the very beginnings of the universe and took a look at Peirce’s cosmology. To do this we must lay a bit of ground work.

THE CATEGORIES

Of all the elements of Peirce’s philosophy, there is no question that the most important is that of the phenomenological categories. His evolutionary metaphysics, his view of science, his cosmogony, his logic, his semiotics—all are based on this key arrangement. So before we can move on to his cosmology, we have to take the time to get a feeling for these fundamental categories of all being.

From one point of view the categories are extremely simple—there are only three. But they are unlike any previous attempt to derive the fundamental categories of experience, and it takes a bit of effort to grasp what Peirce is trying to get at. Because he brings to bear an unusual perspective on the constitution of reality, his statement of the categories may seem odd at first. Nevertheless, they turn out to be remarkably useful and ground an evolutionary metaphysics which is unified and consistent. From this foundation he depicts the evolution of the world from pure potentiality to what we have today, and he does it from bottom up.

Phenomenology for Peirce is an unprejudiced, fresh look at the reality around us precisely as it appears to us (CP 5.37). It does not require special instruments or conditions. Rather it requires “that faculty of seeing what stares one in the face, just as it presents itself, unreplaced by any interpretation, unsophisticated by any allowance for this or for that supposed modifying circumstance” (CP 5.42).

Peirce first described his three universal categories early in his career (1868; see CP 1.545-567), and he did not alter them thereafter. The categories are the fundamental, irreducible aspects of everything that exists. In naming the categories, Peirce wanted to avoid using terms that would be familiar and therefore misleading, and at the same time he wanted to convey a sense of their fundamentalness. Therefore, he called them Firstness, Secondness, and Thirdness:

Three conceptions are perpetually turning up at every point in every theory of logic, and in the most rounded systems they occur in connection with one another. They are concepts so very broad and consequently indefinite that they are hard to seize and may be easily overlooked. I call them the conceptions of First, Second, Third. First is the conception of being or existing independent of anything else. Second is the conception of being relative to, the conception of reaction with, something else. Third is the conception of mediation whereby a first and second are brought into relation. (CP 6.32)

Firstness refers to quality or feeling. Quality is a pure abstraction, such as redness. A quality does not exist as such in the world, but only as “embodied”: that scarf is red. Redness does not exist as such, but only in some existing thing. In itself it is a may-be, a potentiality, and “its mere may-being gets along without any realization at all” (CP 1.304), but can be made real through its embodiment in an existing thing.

“Category the First is...a quality of Feeling,” says Peirce (CP 5.66). He tells us “by a feeling I mean an instance of that sort of element of consciousness which is all that it is positively, in itself, regardless of anything else;” it is “simply a quality of immediate consciousness” (CP 1.306-307). Peirce states that “Firstness is predominant in feeling, as distinct from objective perception, will, and thought. (CP 1.302). So he tells us by way of example that a First may be a *feeling of red*.

Secondness refers to the blunt existence of a thing. It is the scarf considered purely from the point of view of its existence, not in terms of any qualities that may be attached to it. Peirce points out that “to say that something has a mode of being which lies not in itself but in its being over against a second thing, is to say that that mode of being is the *existence* which belongs to fact” (CP 1.432). For him Secondness is core to the very notion of fact:

Whenever we come to know a fact, it is by its resisting us. A man may walk down Wall Street debating within himself the existence of an external world; but if in his brown study he jostles up against somebody who angrily draws off and knocks him down, the sceptic is unlikely to carry his scepticism so far as to doubt whether anything beside the ego was concerned in that phenomenon. (CP 1: 431)

The described experience has a duality, a Secondness, a sharp separation of subject and object. This involves a kind of *resistance*. What creates reality, says Peirce, is opposition:

The fact “takes place.” It has its here and now; and into that place it must crowd its way. For just as we can only know facts by their acting upon us, and resisting our brute will...so we can only conceive a fact as gaining reality by actions against other realities” (CP 1.432).

I might add parenthetically that this recalls the Jamesian conception of the resistive quality of “stubborn fact.” For Peirce, Secondness is what makes a fact a *fact*, something stubbornly standing there, resisting all attempts to deny it.

In this sense, the notion of Secondness is closely tied to Peirce’s conception of Pragmatism, since we only know the reality or truth of the thing by its actions upon us. That is why he can say, “A thing without oppositions *ipso facto* does not exist” (CP 1. 457).

“Category the Third is the Idea of that which is such as it is as being a Third, or Medium, between a Second and its First” (CP 5.66) Thirdness is relation. It refers to the fact that *redness is in the scarf*. It is the final ingredient needed for the full real existence of something.

Thirdness “pours in upon us through every avenue of sense” (CP 5. 157) and is found in every phenomenon. Firstness and Secondness are not enough for full existence: there must also be Thirdness. No combination of dyadic relationships can do the job. Later in his life Peirce said that he observed a great many thinkers trying to construct a system without putting any Thirdness in it, but, he believed, this project was doomed to failure. Peirce discusses *giving* as an illustrative example. When we say “A gives B to C,” we are not saying A puts B away from himself and then C comes along and picks up B. Giving is a relationship over and above these two, a relationship that consists in connecting them—Thirdness is essential.

For Peirce, Thirdness involves a representation, a *sign*. A sign has three elements; it is something that represents something (its object) to someone or something else (its interpretant). It brings the object and the interpretant into relation. It is not possible here to further expand this crucial aspect of Thirdness in Peirce’s thought. I will return to this subject later.

Another important aspect of Thirdness is that it contains the idea of *generality*. Generality is present whenever what is desired or noted is not the individual thing, but rather a quality that it possesses, a quality which has the potentiality to be attributed to many other existing things. That is why for Peirce, *law* is Thirdness. According to him a Third involves the conception of mediation, whereby a First and a Second are brought into relation. In this way we may say that any law of nature requires not merely a quality (a First) but actual existent things that embody that quality (Seconds). Thus it is with any law: law links qualities and existing things in a relationship, and that linking makes the law general. More of this later.

Now we are ready to move on to Peirce’s vision of the origin of the universe as we know it today.

COSMOGONY

Peirce believed that mind pervades all of nature (in varying degrees), and is not found merely in its most advanced animal species. This panpsychistic view, combined with synechism, his theory of

continuity, meant for Peirce that mind is extended in some sort of continuum throughout the universe.

In 1899 Peirce posed the question:

What is it that philosophy ultimately hopes to accomplish? It is, if we mistake not, to find that there is some intelligible truth, some absolutely valid reasonableness, to ascertain how far this reasonableness governs the universe, and to learn how we may best do its service....There must be nothing hopelessly and finally unreasonable, or in so far philosophy is to no purpose and its hope is vain. (CN, Vol. II, 208).

Peirce believed philosophy could accomplish this task, and that to do so it was necessary to undertake an intellectual journey back to the beginnings of the universe.

In what some call a work of speculative daring unequalled in his other writings, one put together during the period when he was at the height of his philosophic powers, Peirce worked out a detailed description of how our universe began. One might wonder why he put so much into this project. The truth is that he had some very practical reasons for making such efforts. One reason was that he had noted that some laws governing phenomena in very diverse fields show a distinct similarity and believed that only by framing a cosmogony could such similarities be explained. But perhaps the most important reason was his concern for the progress of science. Although, as I have pointed out, Peirce said that our instinct for true hypotheses is formidable, there comes a phase in the development of the sciences, particularly the physical sciences, when, as the inner structure becomes more subtle and the details more elusive, hitting on the truth becomes extraordinarily difficult (Turley 1977, pp. 64-65). So Peirce was looking for something to supplement our innate instinct for the right hypothesis:

We need some hint as to how molecules may be expected to behave; whether, for instance, they would be likely to attract or repel one another inversely as the fifth power of the distance, so that we may be saved from many false suppositions, if we are not at once shown the way to the true one. Tell us how the laws of nature came about, and we may distinguish in some measure between the laws that might and laws that could not have resulted from such a process of development. (CP 1.408)

And from the start there was no doubt about the mechanism involved in the origins of those laws: "Now the only possible way of accounting for the laws of nature and for uniformity in general is to suppose them results of evolution" (6.13).

To get things off on the right foot, Peirce points out that metaphysical speculations about origins have nothing to do with religion, saying that "the belief which I shall do well to embrace in my practical affairs, such as my religion, may not accord with the propositions which a sound scientific method requires me provisionally to adopt at this stage of my investigation" (CP 6. 216)

Peirce puts us back at the ultimate beginning and asks us to consider the state of things in which the universe did not exist and then consider how it could have arisen. He immediately amends this way of stating the situation, because, as he points out, time itself is an “organized something” with its law or regularity and so must be considered part of the universe whose origin is being considered. We must consider the state of things before time was organized, so that when we speak of the universe as “arising” we cannot mean that literally, and we cannot use the words “before” and “after” in a temporal sense, but only in the sense of a logical sequence (CP 6.214).

Peirce writes:

The initial condition, before the universe existed, was not a state of pure abstract being. On the contrary it was a state of just nothing at all, not even a state of emptiness, for even emptiness is something. (CP 6. 216)

So, says Peirce, we start with nothing, “pure zero,” and immediately we are involved with the three categories:

But this is not the nothing of negation. For *not* means *other than*, and *other* is merely a synonym for the ordinal numeral *second*. As such it implies a first; while the present pure zero is prior to every first. The nothing of negation is the nothing of death, which comes *second* to, or after, everything. But this pure zero is the nothing of not having been born. There is no individual thing, no compulsion, outward nor inward, no law. It is the germinal nothing, in which the whole universe is involved or foreshadowed. As such it is absolutely undefined and unlimited possibility—boundless possibility. There is no compulsion and no law. It is boundless freedom. So of *potential* being there was in that initial state no lack. (CP 6: 217)

Now, what next? What necessarily resulted from this state of things? Peirce tells us that the only sane answer to that question is that “where freedom was boundless nothing in particular necessarily resulted” (CP 6.218). Separating himself from Hegel, Peirce says that although the universe as a whole must be regarded as rational, the logic of evolution and of life need not be supposed to be of a wooden kind that absolutely constrains a given conclusion. Rather we are dealing with the “logic of freedom or possibility.” Now this logic must annul itself, otherwise “it remains a completely idle and do-nothing potentiality; and “a completely idle potentiality is annulled by its complete idleness.” So although no *specific* thing must necessarily occur, *something* has to happen (CP 6.219).

Firstness

Understanding the next step in this sequence is very important for making sense out of Peirce’s cosmology:

The first and most fundamental element that we have to assume is a Freedom, or Chance, or Spontaneity, by virtue of which the general vague nothing-in-particular-ness that preceded the chaos took on a thousand definite qualities. (CP 6.200).

I do not mean that potentiality immediately results in actuality. Mediatly perhaps it does; but what immediately resulted was that unbounded potentiality became potentiality of this or that sort—that is, of some *quality*. Thus the zero of bare possibility, by evolutionary logic, leapt into the *unit* of some quality. This was hypothetic inference. Its form was:

Something is possible,
Red is something;
Therefore, Red is possible.

Now a *quality* is a consciousness. I do not say a *waking* consciousness—but still, something of the nature of consciousness. A *sleeping* consciousness, perhaps. A possibility, then, or potentiality, is a particular *tinge* of consciousness. (CP 6.220-221)

Peirce uses the term “*quale*-consciousness” to describe this potentiality, and he spends a great deal of time describing what this involves. Although he had used the color Red as an example of a *quale*-consciousness, he says that the *quale*-consciousness is not confined to simple sensations: “There is a distinctive *quale* to every combination of sensations so far as it is really synthetized—a distinctive *quale* to every work of art—a distinctive *quale* to this moment as it is to me—a distinctive *quale* to every day and every week—a peculiar *quale* to my whole personal consciousness” (CP 6.223).

Importantly, each *quale* is in itself what it is *for itself*, without reference to any other. When we compare one *quale* to another, we may say they are alike, but it is absurd to say that one *quale* is in itself like or not like another. The only thing one *quale* has in common with another is *unity*, and every possible unity originates in the *quale*-consciousness. From here Peirce moves on to a striking analysis of this issue of unity:

Perhaps it may be thought that hypnotic phenomena show that subconscious feelings are not unified. But I maintain on the contrary that those phenomena exhibit the very opposite peculiarity. They *are* unified so far as they are brought into one *quale*-consciousness at all; and that is why different personalities are formed. Of course, each personality is based upon a “bundle of habits,” as the saying is that a man is a bundle of habits. But a bundle of habits would not have the unity of self-consciousness. That *unity* must be given as a centre for the habits. The brain shows no central cell. The unity of consciousness is therefore not of physiological origin. It can only be metaphysical. So far as feelings have any continuity, it is the metaphysical nature of feeling to have a *unity*. ...In *quale*-consciousness there is but one quality, but one element. It is entirely simple. (CP 6.228-231)

It follows that “the *quale*-consciousness is not a consciousness of strife, or duality” (CP 6. 232). The unity is inviolable:

All the operations of the intellect consist in taking composite photographs of *quale*-consciousness. Instead of introducing any unity, they only introduce conflict that was not in the *quale*-consciousness itself. ...Quality or *quale*-consciousness is all that it is in and for itself....*Quale*-consciousness cannot blend with *quale*-consciousness without its loss of identity. (CP 6.233-235)

Eventually Peirce came to replace the awkward term “*quale-consciousness*” with “feeling”: “A feeling is what it is, positively, regardless of anything else. Its being is in it alone, and it is a mere potentiality”(CP 6.343). This feeling was the outcome of Chance/Freedom/Spontaneity, for, as Peirce saw it, “Wherever chance-spontaneity is found, there in the same proportion feeling exists. In fact, chance is but the outward aspect of that which within itself is feeling” (CP 6.265). Whether he used the term *quale-consciousness* or feeling, it is in the category of a *First* in Peirce’s schema described above: “I think too that whatever is First is *ipso facto* sentient” (CP 6.201).

So what evolved was a world of sense qualities (“sense” not being equated with the five senses) that are mere potentialities. From this Platonic world of qualities that are eternal possibilities the *actual* universe is ultimately evolved.

Secondness

In the first stage there is feeling independent of any action, reaction, or reflection. In this primal chaos:

There was an intensity of consciousness there, in comparison with which all that we ever feel is but as the struggling of a molecule or two to throw off a little of the force of law to an endless innumerable diversity of chance utterly unlimited. (CP 6.265)

Now, the second step in the evolution of the universe:

The *second* element we have to assume is that there could be accidental reactions between those qualities. The qualities themselves are mere eternal possibilities. But these reactions we must think of as *events*. Not that *Time* was. But still, they had all the here-and-nowness of events. (CP 6.200)

This next element in the cosmological sequence is a *Second*. It is described as a brute reaction. It is nothing for itself: “Whatever it is, it is for what it is attracting and what it is repelling: its being is actual, consists in action, is dyadic. That is what I call *existence*” (CP 6.343). The world of Secondness is a world of events, or fact, and its being consists in the mutual interaction of actualized qualities. It introduces the notion of over-against-ness, resistance. Although this means existence, it is not yet the full existence of real things. Full existence requires Thirdness, the introduction of the *relationship* between the two reacting qualities produced by chance from the plenum of qualities.

The sequence of cosmogony, then, is this: the world of our actual experience arises from Firsts and Seconds which are linked by Thirds. Thirds relate a Second to a First, and introduces the notion of generality and law to our experiences by which existing objects tend to interact in a certain general way. Here it is that Peirce introduces the notion of *habit*.

Habit

As I mentioned, Peirce believed that the universe, because of its Thirdness, is in the last analysis reasonable and capable of being fully understood. This is how he gets there:

In the beginning—infininitely 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 6.33)

That idea has been worked out by me with elaboration. It accounts for the main features of the universe as we know it—the characters of time, space, matter force, gravitation, electricity, etc. It predicts many more things which new observations can alone bring to the test. May some future student go over this ground again, and have the leisure to give his results to the world. (CP 6.34)

The “sports” (the word in common use in evolutionary biology at the time) or spontaneous occurrences in the qualitative world brought about a *habit-taking* tendency, a generalizing tendency in that “it causes action in the future to follow some generalization of past actions; and this tendency is itself something capable of similar generalizations; and thus, it is self-generative” (CP 1.409).

For Peirce a habit “denotes such a specialization, original or acquired, of the nature of a man, or an animal, or a vine, or a crystallisable chemical substance, or anything else, that he or it will behave, or always tend to behave, in a way describable in general terms upon every occasion (or on a considerable proportion of the occasions) that may present itself of a generally describable character” (CP 5.538). The world we experience comes about through the agency of habit-taking. This is the basis for Peirce’s *evolutionary* approach to both cosmogony and metaphysics. Remember that at the beginning, freedom (or spontaneity or chance) brings about accidental reactions between the qualities—reactions that must be seen as *events*, which in a non-temporal way have a here-and-nowness. Peirce also called these events “flashes” (CP 1.412).

Peirce described the tendency to habit-taking in several places (e.g., CP 1.412-416, 6.145-148, 6.490, EP 1:223-224, RTL, pp. 218-241). It will not be possible to go into these discussions at length. It may suffice to say that the tendency to habit-taking is based on the workings of chance and probabilities. Peirce puts it this way:

The main element of habit is the tendency to repeat any action which has been performed before. It is a phenomenon at least coextensive with life, and it may cover a still wider real realm. Imagine a large number of systems in some of which there is a decided tendency toward doing again what has once been done, in others a tendency against doing what has

once been done, in others elements having one tendency and elements having another...The result is that chance in its action tends to destroy the weak & increase the average strength of the objects remaining. Systems or compounds which have bad habits are quickly destroyed, those which have no habits follow the same course; only those which have good habits tend to survive. (EP 1: p. 223)

This understanding leads to the conclusion that the laws of nature evolve:

Hence I was led to the hypothesis that the laws of the universe have been formed under a universal tendency of all things toward generalization and habit-taking. The next problem was to find a method of reasoning by which I could deduce with mathematical certainty the exact nature and formulae of the laws which would be formed under the influence of such a tendency and having deduced them to compare them with nature and thus see whether the theory was tenable or not. (RTL, p. 241)

Peirce thought, though this position might seem absurd to the amateur, it would be readily understood by any serious scientist:

The non-scientific mind has the most ridiculous ideas of the precision of laboratory-work, and would be much surprised to learn that, excepting electrical measurements, the bulk of it does not exceed the precision of an upholsterer who comes to measure a window for a pair of curtains. (NEM III: 897)

Students of molecular physics presume, for reasons that seem good to them, that certain things are absolutely true of the universe in every part, such as the tridimensionality of space, its infinity, the law of action and reaction, the principle of energy, and the like. These universal truths, as they are held to be, have a basis in experience, but are extended so far beyond the domain of observation as to be fairly termed metaphysical. In many branches of physics it is easy to show that they are near enough true for practical purposes; but in molecular discussions the question of the truth of such things has to be sifted to the bottom on pain of leaving a grave doubt over the whole subject. (CN, Vol. I, 152-153)

This position is destructive of any notion of determinism in the operations of nature. Peirce makes Freedom/Chance/Spontaneity a central element of his metaphysics, and this element is not only present at the beginning of things, but remains in operation throughout the whole of the evolution of things that follow.

Thirdness

The habit-taking tendency brings Thirdness, in the sense of the building up of *laws*, into the process, and is the foundation for all that exists and will exist is the result of evolution. This applies not merely to existing beings but also to time, space, substances, and laws of nature. Turley, in his valuable book on Peirce's cosmogony, describes the coming into being of *time*:

The temporal state evolved from one that was not, and this took place by the agency of habit-taking. His [Peirce's] conjecture as to how this happened is as follows: in the chaos of qualities or feelings there occurred a "flash." Since he goes on to characterize this as an event, we can presume that what Peirce is speaking of is the accidental reaction or sporting already alluded to. The first flash was followed by another similar in character, and this, in turn, by another; thus, a habit was in the process of formation, and this habit under the influence of the supreme cosmic habit, the habit of taking habits, strengthened itself "until the events would have been bound together into something like a continuous flow" (CP 1.412). In some such manner, time arose. (Turley 1977, p. 75)

It should be noted that Peirce considered the possibility of different "streams" of events developing in this way:

Different flashes might start different streams, between which there should be no relations of contemporaneity or succession. So one stream might branch into two, or two might coalesce. But the further result of habit would inevitably be to separate utterly those that were long separated, and to make those which presented frequent common points coalesce into perfect union. (CP 1.412)

Thus, for Peirce, the development of different times (and therefore of different worlds) is well within the realm of possibility.

Space, too, would have come into being in an early phase of evolution. Peirce believed that space developed after time. He speculated that the first instance of spatial extension when pairs of "flashes" whose members did not succeed each other, but "which are reciprocally second, each member of the pair to the other...and thus habits will be formed which will constitute a spatial continuum, but differing from our space by being very irregular in its connections" (CP 1.413).

Substances in time and space are described as "bundles of habits." Peirce says:

Pairs of states will also begin to take habits, and thus each state having different habits with reference to the different other states will give rise to bundles of habits, which will be substances. Some of these states will chance to take habits of persistency, and will get to be less and less liable to disappear; while those that fail to take such habits will fall out of existence. Thus, substances will get to be permanent. (CP 1.414)

SYNECHISM

Peirce says that all of reality is one continuum. He notes that "if all things are continuous, the universe must be undergoing a continuous growth from non-existence to existence" (CP 1.175). This is his doctrine of *synechism*.

A continuum, for Peirce, is that which can never be filled by parts. I will not attempt to summarize his mathematical derivation of this position, but simply point out that he says that “it seems necessary to say that a continuum...contains no definite parts; that its parts are created in the act of defining them and the precise definition of them breaks the continuity...A true continuum is something whose possibilities of determination no multitude of individuals can exhaust” (CP 6.168-170). So it is that, as Andrew Reynolds puts it, synechism “forbids us to posit brute atomic facts in our attempts to explain the world” and “exhorts us to attempt to tie together all known facts about the universe, leaving no loose ends” (Reynolds 2002, p. 11). Peirce’s view is radical, holding that all of nature is continuous and every aspect of nature is continuous with every other aspect:

Once you have embraced the principle of continuity no kind of explanation of things will satisfy you except that they *grew*. The infallibilist naturally thinks that everything always was substantially as it is now. Laws at any rate being absolute could not grow. They either always were, or they sprang instantaneously into being by a sudden fiat. Like the drill of a company of soldiers. This makes the laws of nature absolutely blind and inexplicable. Their why and wherefore can’t be asked. The fallibilist won’t do this. (CP 1.175)

And Peirce is a fallibilist. For him, by the principle of synechism, laws simply cannot be absolute: any determination of physical laws and constants by experimental observation will of necessity be prone to error and imprecision (see Reynolds 2002, pp. 17-18).

The implications of the doctrine of synechism for Peirce’s evolutionary metaphysics are vast, far more than we can trace here. But let me for a moment take us back to where we starting in trying to understand why we “guess” well about the underlying nature of things. We are connected to everything and thereby have the instinctive means to say something about the whole. Michael Ventimiglia has pointed out that “Peirce thought we should assume, as a regulative ideal of inquiry, that human ideas and inferences were analogues of real cosmic ideas and inferences, that our logic and our concepts were derivative of an objective cosmic logic” (Ventimiglia 2008, p. 663), actually making anthropomorphism a regulative ideal of inquiry:

But as to its being unscientific because anthropomorphic, that is an objection of a very shallow kind....In regard to any preference for one kind of theory over another, it is well to remember that every single truth of science is due to the affinity of the human soul to the soul of the universe, imperfect as that affinity no doubt is....I have after long years of severest examination become fully satisfied that, other things being equal, an anthropomorphic conception, whether it makes the best nucleus for a scientific working hypothesis or not, is far more likely to be approximately true than one that is not anthropomorphic. (CP 5.47)

The utter continuity of the universe, the recognition that between matter and mind, for instance, there is unbroken continuity (matter being merely mind hidebound by habit, as we shall see) leads to the fact that the logic of the human mind is what characterizes the logic of the universe as a whole. The reality of continuity says that all is connected, that these connections go back in time and spread across space in the present, and that it is through the feelings generated in these unbroken connections that we have an instinctive knowledge of the nature of underlying reality. This will

become even clearer when, a little later, I examine what Peirce calls “the law of mind.” However, first a few words about “chance.”

ABSOLUTE CHANCE

Peirce said that “chance is the one essential agency upon which the whole process [of evolution] depends” (W 4:548). Peirce talks of two kinds of chance: ordinary chance and absolute or pure chance. With ordinary chance, “a certain antecedent, for example that I throw a die from a box, determines the general character of a consequent, namely that a number is turned up, but does not specifically determine the character of the consequent, that is what number that is to be; but that is determined by other causes which cannot be taken into account....Ordinary chance is merely relative to the causes that are taken into account” (W 4:548-9). Absolute chance, on the other hand, occurs in those sporadic occasions when a law of nature is violated in some infinitesimal degree. So ordinary chance is relative to the various laws at work in the action, while absolute chance is relative to nothing. Nevertheless, “the laws of the two kinds of chance are in the main the same” (W 4: 549). Although it is sporadic, absolute chance does happen, and this recalls to mind that for Peirce the laws of nature are only approximate, habits that have evolved over eons of time and which are still in the process of evolution, for it is the continued intervention of pure chance in the world that makes those laws fallible.

For Peirce, “the hypothesis of absolute chance is part and parcel of the hypothesis that everything is explicable, not absolutely, rigidly without the smallest inexactitude or sporadic exception, for that is a self-contradictory supposition but yet explicable in a general way” (W 4: 549). He asserts that everything in the world is subject to chance, and that, paradoxically, the operation of chance brings about a definite regularity. He gives as example a situation in which a million players sit down to play a fair game of dice. Each player has a million silver dollars to pay with, and each has an even chance of winning each round of play. First of all, we will know very closely how the million players will stand at the end of a million bets: “About 10 will have lost \$2000 or more, no one over \$3000; and half of them after playing day and night for nearly a fortnight at the rate of one bet a second will stand within \$300 of where they started” (W 4: 549). But, says Peirce, suppose that over the course of time the dice become worn down; he points out that chance changes everything, and chance will change that. And suppose that the dice are such that every time a man wins he has a slightly better chance of winning on subsequent trials. He says that this will make little difference in the first million bets, but its ultimate effect will be to separate the players into two classes, those who had gained and those who had lost, with a few who had come out even. As play continues the two main classes “would separate themselves more and more, faster and faster. If on the other hand the wearing down of the dice were to have the opposite effect and were to tend to make him lose who had hitherto gained and *vice versa*, the tendency would be to prevent the separation of rich and the poor” (W 4:550). Chance will go on acting in various ways, affecting things one way at one time and another way at another time. “If,” says Peirce, “these effects were to be alternated after billions of trials, the effect would be to make numbers of different distinct classes of players. It would be easy if I had time to state the solutions to a number of similar problems in probabilities” (W 4: 550).

Everything is subject to change, says Peirce, and will change after a time by chance, and among those changeable circumstances will be the effects of changes on the probability of further change. So it follows that “chance must act to move things in the long run from a state of homogeneity to a state of heterogeneity” (W 4:550). To illustrate the effects of this state of affairs on physics, he gives the example of the dissipation of energy. He points to the commonly accepted belief that the universe is tending by virtue of its necessary laws toward a “death” in which there shall be no force but heat and temperature everywhere the same. He calls this

a truly astounding result, and the most materialistic [and] the most anti-teleological conceivable. We may say that we know enough of the forces at work in the universe to know that there is none that can counteract this tendency away from every definite end but death. But although no force can counteract this tendency, chance may and will have the opposite influence. Force is in the long run dissipative; chance is in the long run concentrative. The dissipation of energy by the regular laws of nature is by those very laws accompanied by circumstances more and more favorable to its reconcentration by chance. (W 4: 551)

Peirce sees his doctrine of absolute chance as constitutive of both regularity and change in the universe. He names this doctrine *tychism*, from the Greek word for “chance.”

THE LAW OF MIND

I now move on to an examination of Peirce’s notion of “The Law of Mind,” which has profound implications for our discussion of survival and related phenomena. He presented his understanding of this conception in an article, “The Law of Mind” in *The Monist* in 1892. There he drew out the implications of *continuity* for our understanding of mind. He states his starting position:

I have begun by showing that tychism must give birth to an evolutionary cosmology, in which all the regularities of nature and mind are regarded as products of growth, and to a Schelling-fashioned idealism which holds matter to be more specialized and partially deadened mind. (CP 6.102)

He is here referring to something he had written in *The Monist* in 1891: “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). Peirce conceived of physical laws as ingrained habits exhibited by matter, and, in turn, thought of matter as mind that has become sodden with habit (Reynolds 2002, p. 52). He says that he must “regard matter as mind whose habits have become fixed so as to lose the powers of forming and losing them” (CP 6.101), that “if habit be a primary property of mind, it must be equally so of matter, as a kind of mind” (CP 6.270).

Later in his law of mind treatise, Peirce makes this observation:

Consistently with the doctrine laid down in the beginning of this paper, I am bound to maintain that an idea can only be affected by an idea in continuous connection with it. By

anything but an idea, it cannot be affected at all. This obliges me to say, as I do say, on other grounds, that what we call matter is not completely dead, but is merely mind hidebound with habits. It still retains the element of diversification; and in that diversification there is life. (CP 6. 158)

So although matter is heavily habitualized, it does retain something of Freedom/Chance/Spontaneity—though a very small amount of it.

How did he get here? By drawing out the implications of The Law of Mind stated thus:

Logical analysis applied to mental phenomena shows that there is but one law of mind, namely, that ideas tend to spread continuously and to affect certain others which stand in a peculiar relation of affectability. In this spreading they lose intensity, and especially the power of affecting others, but gain generality and become welded with other ideas. (CP 6. 104)

He begins by saying that we ordinarily conceive of ideas as things that are reproduced, that are passed from mind to mind, that are similar or dissimilar to each other—in other words we treat them as substantial things. But, says Peirce, this way of understanding ideas leaves us with an insuperable difficulty. For example, take an idea as an event in an individual consciousness. Peirce takes pains to show (in an argument that I cannot reproduce here) that an idea once past is gone forever, and any supposed recurrence of it is a new idea, not the old one at all. “How then,” asks Peirce, “can a past idea be present?” He answers: “Only by direct perception. In other words, to be present it must be *ipso facto* present” (CP 6.109).

Peirce shows how this is possible through an examination of the flow of ideas in time which reveals how the principle of continuity operates in that flow. The experienced sequence of thoughts in an interval of time constitutes an unbreakable continuity by which each infinitesimal instant has something of the preceding infinitesimal instant, along with a feeling of what is to come in the next infinitesimal instant. In this way when I am aware of something, I am connected by this continuous flow back indefinitely into the past of the flow. In this way I have a direct perception of a past idea: “In an infinitesimal interval we directly perceive the temporal sequence of its beginning, middle, and end—not, of course, in the way of recognition, for recognition is only of the past, but in the way of immediate feeling” (CP 6.111).

In the article, Peirce then elaborates on this idea with a lengthy discussion of “Infinity and Continuity, in General” where he discusses continuity in terms of its history in philosophy and mathematics up to that point. He next moves on to take up the important notion of a *general idea*.

What constitutes an idea for Peirce? Three elements:

The first is its intrinsic quality as a feeling. The second is the energy with which it affects other ideas, an energy which is infinite in the here-and-nowness of immediate sensation, finite and relative in the recency of the past. The third element is the tendency of an idea to bring along

other ideas with it. As an idea spreads, its power of affecting other ideas gets rapidly reduced; but its intrinsic quality remains nearly unchanged. (CP 6.135-136)

Referring to the third element, Peirce states that “a finite interval of time generally contains an innumerable series of feelings; and when these become welded together in association, the result is a general idea” (CP 6.137).

What makes up a general idea for Peirce? Three characteristics:

The first character of a general idea so resulting is that it is living feeling. A continuum of this feeling, infinitesimal in duration, but still embracing innumerable parts, and also, though infinitesimal, entirely unlimited, is immediately present. And in its absence of boundedness a vague possibility of more than is present is directly felt.

Second, in the presence of this continuity of feeling, nominalistic maxims appear futile. There is no doubt about one idea affecting another, when we can directly perceive the one gradually modified and shaping itself into the other. Nor can there any longer be any difficulty about one idea resembling another, when we can pass along the continuous field of quality from one to the other and back again to the point which we had marked.

Third, consider the insistency of an idea. The insistency of a past idea with reference to the present is a quantity which is less the further back that past idea is, and rises to infinity as the past idea is brought up into coincidence with the present. Here we must make one of those inductive applications of the law of continuity which have produced such great results in all the positive sciences. We must extend the law of insistency into the future....

...feeling which has not yet emerged into immediate consciousness is already affectible and already affected. In fact, this is habit, by virtue of which an idea is brought up into present consciousness by a bond that had already been established between it and another idea while it was still in futuro....

So when a feeling emerges into immediate consciousness, it always appears as a modification of a more or less general object already in the mind. The word suggestion is well adapted to expressing this relation. The future is suggested by, or rather is influenced by the suggestions of, the past. (CP 6.138-142)

After these remarkable assertions, Peirce returns to the notion of *habit*. He now redefines habit in terms of the law of mind: Habit is that specialization of the law of mind whereby a general idea gains the power of exciting reactions. In his analysis of the presence of continuity in thought, presented above, he shows how a past thought is by direct perception present in a present thought. In that way the past ideas influences present ideas. This means that a past idea brings about a tendency for a future idea to occur. And this is more or less what habit consists in: the tendency to make a certain future events happen. In this sense, the mind is not subject to “law” in any absolute sense: “It only experiences gentle forces which merely render it more likely to act in a given way

than it otherwise would be”(CP 6.148), and in fact these “gentle forces” are what Peirce means by the presence of *final causes* in the evolution of the universe. Teleology, understood in this way, is the only thing that can make sense of evolution.

So for Peirce:

General feelings are not mere words, nor do they consist in this, that certain concrete facts will every time happen under certain descriptions of conditions; but they are just as much, or rather far more, living realities than the feelings themselves out of which they are concentered. And to say that mental phenomena are governed by law does not mean merely that they are describable by a general formula; but that there is a living idea, a conscious continuum of feeling, which pervades them, and to which they are docile. (CP 6. 152)

With this, Peirce has elaborated the content of his stated law of mind as far as he is going to go for now. But I would like to add one comment. If we turn our thoughts back to the previous discussion of Peirce’s cosmogony, it should be quite clear now that the beginning and evolution of the universe happens according to the Law of Mind. The universe arises first of all from feeling. And things within the universe affect each other and evolve exactly as ideas do, because the universe is in its basic essence mind. Whether it is mind found in forms that evince a notable amount of Freedom/Choice/Spontaneity, such as living things, and especially human beings, or found in more habitualized forms with a much reduced capacity for spontaneity, such as iron and zinc, it is still mind.

Now although Peirce has finished his discussion of the Law of Mind as such, he still has a surprise for us, because he continues the article with a provocative examination of *personality*, a subject of great relevance to our survival project.

PERSONALITY

Peirce’s idea of personality flows directly from the preceding discussion of the Law of Mind. He calls personality “a particular phenomenon which is remarkably prominent in our own consciousness” (CP 6.155). Interestingly, he refers to observations about double and multiple personality and says that these cases make it clear that personality is “some kind of connection or coordination of ideas” (CP 6.155). He points out that in the previous discussion it was discovered that a connection between ideas is a general idea and that a general idea is a living feeling. For Peirce, personality is a general idea and like any general idea, cannot be apprehended in an instant, but must be lived in time. Also, no finite time can actually embrace it in all its fullness. “Yet,” says Peirce, “in each infinitesimal interval it is present and living, though specially colored by the immediate feelings of that moment” (CP 6. 155). So it is that personality, insofar as it is apprehended in a moment, is immediate self-consciousness.

For Peirce the person is a unified living feeling, bringing all of its elements together through mutual relations: "All that is necessary...to the existence of a person is that the feelings out of which he or she is constructed should be in close enough connection to influence one another" (CP 6.270).

But there is more to it than that, says Peirce, for in so far as personality is a coordination of ideas, it manifests a teleological harmony of ideas. The teleology here is more than the mere purposive conscious pursuit of a premeditated end:

It is a developmental teleology. This is personal character. A general idea, living and conscious now, it is already determinative of acts in the future to an extent to which it is not now conscious. This reference to the future is an essential element of personality. Were the ends of a person already explicit, there would be no room for development, for growth, for life; and consequently there would be no personality. The mere carrying out of predetermined purposes is mechanical. (CP 6.156-157)

For personality to be teleological it must possess the power to act. Peirce identifies that power with the "I": "The leading part of the meaning which we express by "I" is the idea of an unrestrained cause of some future events" (MS 668, 16-17, in Colapietro 1989, p. 112). This makes the "I" a creative spring of efficacious exertions.

Peirce poses the question: how does one person recognize the personality of *another*? He responds that it happens more or less the same way a person becomes aware of his own personality: through direct perception, that is,

That second personality itself enters into the field of direct consciousness of the first person, and is as immediately perceived as his ego, though less strongly. At the same time, the opposition between the two persons is perceived, so that the externality of the second is recognized. (CP 6.160)

Peirce goes on to say that a genuinely evolutionary philosophy, which makes the principle of growth a primordial element of the universe, actually requires the idea of a *personal* creator. This creator is the great personality, the great coordinator and connector of ideas. Peirce makes this bold statement about this matter:

A difficulty which confronts the synechistic philosophy is this. In considering personality, that philosophy is forced to accept the doctrine of a personal God; but in considering communication, it cannot but admit that if there is a personal God, we must have a direct perception of that person and indeed be in personal communication with him. Now if that be the case, the question arises how it is possible that the existence of this being should ever have been doubted by anybody. The only answer that I can at present make is that facts that stand before our face and eyes and stare us in the face are far from being, in all cases, the ones most easily discerned. (CP 6. 162)

PERSONALITY AND OTHERS

According to Peirce's doctrine of Synechism, self and other are inextricably involved with each other. The synechist must not say, "I am altogether myself and not at all you." If you are to embrace the doctrine of continuity,

You must abjure this metaphysics of wickedness. In the first place, your neighbors are, in a measure, yourself, and in a far greater measure than without deep studies in psychology, you would believe. Really, the selfhood you attribute to yourself is, for the most part, the vulgarest delusion of vanity. In the second place, all men who resemble you and are in analogous circumstances are, in a measure, yourself, though not quite in the same way in which your neighbors are you. (CP 7.571)

Castigating those who ascribe to the thinking of Descartes, Peirce wrote:

There are those who believe in their own existence, because its opposite is inconceivable; yet the most balsamic of all the sweets of sweet philosophy is the lesson that personal existence is an illusion and a practical joke. Those that have loved themselves and not their neighbors will find themselves April fools when the great April opens the truth that neither selves nor neighborselves were anything more than mere vicinities; while the love they would not entertain was the essence of every scent. (CP 4.69)

Synechism holds that all communication from mind to mind is through continuity of being, and that relations to other finite selves and to the divine self are constitutive of our identity.

A man is capable of having assigned to him a *role* in the drama of creation, and so far as he loses himself in that *role*,—no matter how humble it may be,—so far he identifies himself with its Author. (CP 7.572)

Nevertheless, although for Peirce a central feature of the self is its connections to other selves and the divine self, still he made a point to preserve the notion that the self is in some significant way autonomous. For Peirce, human self-consciousness is the achievement of an incarnate consciousness, that is, the human body with its unique capacities plays an indispensable role (Colapietro 1989, p.69). The child is able to become conscious of itself not only through sensing things and desiring them, but also through refined capacities for acting and for communicating. For these things, the body is indispensable. In the process of communicating with others, the growing child finds out that what others say is the best evidence for what is real, "so much so that testimony is even a stronger mark of fact than *the facts themselves*, or rather than what must now be thought of as the *appearances themselves*" (CP 5.233).

To the child, testimony about the nature of the world comes largely from adults and has a certain authority. That testimony may conflict with the child's personal take on things, and that fact, along with his own growing fund of experience, brings home the possibility that he can be mistaken in his perceptions. When his further experience confirms the falsity of his previous ideas, "he becomes

aware of ignorance , and it is necessary to suppose a *self* in which this ignorance can inhere" (CP 5.233). So it is that "testimony gives the first dawning of self-consciousness" (CP 5.233). The child also comes to know that what he feels or wants may not be shared by others (he wants to pick up the spider, but his mother says "no"). The child becomes aware that these feelings are unique to him, part of a *private* world. The speech and actions of others reveal that they too have their own *private* worlds. All these realizations bring home the fact of error (they can be right and I wrong), and error can only be explained by supposing a self that is fallible (CP 5.233). The experience of the testimony of others, the possibility of error, and the discovery of privacy, all lead to the idea of being an individual self which is constituted by its relations to others and distinguishable but not separate from others. Peirce said that to be a self is to be a possible member of some such community (CP 5.402 n.2).

Peirce held that the self must also be a center of purpose and power, and although the self is defined by its relations to others, it is also something in itself (as James said in *Principles* "a sort of innermost center within the circle, of sanctuary within the citadel" James 1890, Vol. 1, p. 297). Peirce pointed out that the self, like any other existing thing considered in itself, possesses an aspect of firstness: "To recognize the firstness of the self is, in part, to see the individual self in its utter uniqueness and qualitative wholeness (Colapietro 1989, p. 74, see CP 1:357).

Remember that for Peirce an open-ended future is an essential element of the individual personality (CP 6.157), and such a future involves the possibility of pursuing purposes different from those presently pursued. The self's evolving identity too is constituted by its association with other selves. In opposition to the ideas of James about the self and self consciousness, Peirce says the synechist must deny "the metaphysics of wickedness" that says that the self is an absolute rather than relative being. Colapietro explains the creation of community in these terms:

The synechistic approach to the individual self denies any absolute breach between self and other. It does so to such an extent that selves in communion with one another form in some way and to some extent, a self of a higher order. That is, genuine community is never a mere collection of individual selves; it is always a living union of integrated selves. This union of selves that constitutes a community is analogous to the coordination of ideas that constitutes a personality; indeed, the community is in some measure a person. (Colapietro 1989, p. 78)

For James the self is absolute isolation, creating an irreducible pluralism (James 1890, I, p. 221). For Peirce the self is defined in terms of continuity. While James made the distance between two minds the most absolute breach in nature, Peirce held that distance to be easily crossed. In response to James's view of the self of the *Principles*, Peirce asked him, "Is not the direct contrary nearer observed facts? You think there *must* be such isolation, because you confound thoughts with feeling-qualities; but all observation is against you. There are some small particulars that a man can keep to himself. He exaggerates them and his personality sadly" (CP 8.81). This reflects Peirce's general difficulty with James's pluralistic approach, confessing in a letter to him that "pluralism does not satisfy either my head or my heart" (CP 8.262).

According to Colapietro, " One way to state this difference between James and Peirce is to note that for the former, the most fundamental feature of personal consciousness is the irreducible fact of privacy, whereas for the latter, its most basic characteristic is the ubiquitous possibility of communication....The solitary self is the illusory self, a being who has its basis in selfishness; the communicative self is the authentic self" (Colapietro 1989, p. 78-79). As we saw in *The Law of Mind*, persons in direct communication with one another actually experience (rather than hypothetically infer) the other as self, as a center of purpose and power like oneself. And Peirce insists that "when a person finds himself in the society of others, he is just as sure of their existence as of his own, and direct awareness of this kind also applies to the living personality of God" (CP 6.436) .

Peirce held that "Two minds can communicate only by becoming in so far one mind" (MS 498, in Colapietro 1989, p. 104). He develops this idea in a remarkable passage about human personality as a word:

But are we shut up in a box of flesh and blood? When I communicate my thoughts and my sentiments to a friend with whom I am in full sympathy, so that my feelings pass into him and I am conscious of what he feels, do I not live in his brain as well as in my own—most literally? True, my animal life is not there, but my soul, my feeling, thought, attention are. If this be not so, a man is not a word, it is true, but is something much poorer. There is a miserable materialistic and barbarian notion according to which a man cannot be in two places at once; as though he were a *thing*! A word may be in several places at once, [e.g.] *six, six*, because its essence is spiritual; and I believe that a man is no whit inferior to the word in this respect. Each man has an identity which far transcends the mere animal;—an essence, a *meaning* subtle as it may be. He cannot know his own essential significance; of his eye it is eyebeam. But that he truly has this outreaching identity—such as a word has—is the true and exact expression of the fact of sympathy, fellow feeling—together with all unselfish interest,—and all that makes us feel that he has an absolute worth. (CP 7.591)

EMBODIMENT

Embodiment is necessary for having a self, for the self is a *sign*: it derives from relations and produces new relations. Peirce also saw evidence of the action of signs outside a nervous system or even a biological organism: "It appears in the work of bees, of crystals, and throughout the purely physical world; and one can no more deny that it is really there, than that the colors, the shapes, etc., or objects are really there" (CP 4.551). Nevertheless, in humans the action of signs reaches its greatest fecundity:

Human instinct is no whit less miraculous than that of the bird, the beaver, or the ant. Only, instead of being directed to bodily motions...or to the construction of dwellings, or to the organization of communities, its theatre is the plastic inner world, and its products are the marvellous conceptions of which the greatest are the ideas of number, time, and space. (MS 318, 44, as quoted in Colapietro 1989, p. 85)

A person as an individual is a continuity of reactions, and as a substance an enduring network of interpenetrating habits. Peirce's exposition of the self as a semiotic process does not contradict his belief in the self as an enduring agency.

A person also has *inwardness*, the capacity to withdraw from the public world with its public signs to a private world, a secret world with its private signs. For Peirce the private world is important to the development of our thoughts, but nonetheless "one of these two worlds, the Inner World, exerts a comparatively slight compulsion upon us...while the other world, the Outer World, is full of irresistible compulsions for us, and we cannot modify it in the least, except by one peculiar kind of effort, muscular effort, and by very slightly even in that way" (CP 5.475)

Peirce summed up his vision of the human person in this way:

Two things here are all-important to assure oneself of and to remember. The first is that a person is not absolutely an individual. His thoughts are what he is "saying to himself," that is, is saying to that other self that is just coming into life in the flow of time. When one reasons, it is that critical self that one is trying to persuade; and all thought whatsoever is a sign, and is mostly of the nature of language. The second thing to remember is that the man's circle of society (however widely or narrowly this phrase may be understood), is a sort of loosely compacted person, in some respects of higher rank than the person of an individual organism. It is these two things alone that render it possible for you—but only in an abstract, and in a Pickwickian sense—to distinguish between absolute truth and what you do not doubt. (CP 5.421)

For Peirce, thinking involves two roles, what he called the *critical self*, representing the habits of the person, and the *innovative self*, representing a challenge to these habits. The former is both a summation of the past and an orientation toward the future. Peirce called this network of interwoven habits at various points "soul," "real self," and "true self" (Colapietro 1989, pp. 93-96). The habits that constitute the critical self are the final product of the self's interpretive efforts. The innovative self introduces Freedom/Chance/Spontaneity in the form of thought into the soul's unfolding. This gives the human personality the power of self-control.

Throughout all his writing about the self, Peirce maintained that 1) it is of the essence of the self to be oriented to the future, 2) the personal self represents a developmental teleology, a pursuit of purposes, in which genuinely novel purposes emerge, and 3) during any moment of life, the self is first and foremost a process in which some species of meaning is evolving (Colapietro 1989, pp. 91-92).

MIND

Peirce complained that psychologists failed to distinguish between mind and consciousness. He said,

Viewing a thing from the outside, considering its relations of action and reaction with other things, it appears as matter. Viewing it from the inside, looking at its immediate character as feeling, it appears as consciousness. (CN 6.268)

According to the law of continuity the continuous spread of feeling produces general ideas. So habit-taking and continuity are more or less the equivalent of “mind,” “intelligence,” or “reason.” For that reason, Peirce describes mind as external, operating through signs, while consciousness is inward.

Peirce says personality is a special kind of mind, one whose parts are coordinating in a particular way, possessing interrelated capacities of self consciousness, self criticism, and self control, and exhibiting the abilities to feel, act, and learn.

If personality is a type of mind, what is mind in general for Peirce?

Mind has its universal mode of action, namely, by final causation. The microscopist looks to see whether the motions of a little creature show any purpose. If so, there is mind there. (CP 1.269)

The psychologists say that consciousness is the essential attribute of mind; and that purpose is only a special modification. I hold that purpose, or rather, final causation, of which purpose is the conscious modification, is the essential subject of psychologists’ own studies; and that consciousness is a special, and not a universal, accompaniment of mind. (CP 7.366)

Peirce saw final causality operating in three realms: 1) detached from any biological organism, 2) in biological organisms as vehicles, and 3) in societies, ranging from the family to the public, and in our indefinite posterity (CP 1:267).

Persons have that specialized kind of mind that exhibits not only final causation but also consciousness. Peirce sharply distinguished consciousness and mind, seeing consciousness as feeling and mind as the continuity of consciousness. “To be conscious is nothing else than to feel” (CP1.318). Consciousness as feeling can be included within an instant of time. It is a passive consciousness of quality, without recognition or analysis. Consciousness as feeling is the immediate element of experience, the inward aspect of things, and as such it is Firstness. Feeling is simply a quality of immediate consciousness (CP 1.307). Mind is an external phenomenon. It is basically Thirdness, exhibiting habitual, intelligible regularity. Mind can be observed in nature and we can form conceptions of it when we encounter it.

I am walking down a quiet street near where I live. I stop in front of a house with a beautiful front yard garden. I see trees, flowers, grass, insects, sand, rocks—beautifully arrayed. On the inside, each of these is feeling (consciousness in Peirce’s general sense), with all the immediacy, vibrancy,

intensity that this involves. Each is, in this sense, “for itself,” a unity taken without consideration of its relatedness to anything else. On the outside, each is mind, each is experienced by me as full of connectedness, meaning, and intelligibility. The whole is a “profusion of signs,” not just to me who, as a human intelligence, can have a conscious appreciation of that fact, but also for everything else that exists. For by continuity, this little garden is related to, spreads into, affects, and changes the whole of the universe.

SEMEIOTICS

Semeiotics (Peirce’s usual spelling) is the “analytical study of the essential conditions to which all signs are subject” (EP 2:327), and *semiosis* is “an action, or influence, which is or involves, a cooperation of three subjects, such as a sign, its object, and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs” (EP 2: 411).

Peirce disagreed with Kant about how we experience reality. Kant said we can never know the thing-in-itself, and all the connections and relations that we experience in the world are something we impose upon it, not something given to us by the world. Peirce’s position was the opposite: our experience of the world is an experience of signs, of relatedness given to us in an immediate perception. James, when forming his revised philosophy which he called “radical empiricism,” took up Peirce’s view and insisted that our experience of the world presents us with relations and connections that already exist in the world. In this way, both Peirce and James opposed what Peirce called “nominalism,” which says that all that exists are individual things, and that it is the thinking subject who adds the notion of their relations—a position entrenched by Hume when he said that causality is simply our experience of repeated sequence of events, and nothing in itself.

Because everything that exists is a sign, everything both exhibits connections and creates new connections. That is why the law of mind says that ideas *spread* continuously and as they spread create *generality* (new thirdness, new signs). From this vision of reality, Peirce said that a person is a bundle of habits that is a *sign*. A person both embodies other signs and is a coordination of ideas that constantly manufactures new signs. We are thirdness (connection, relation) processing organisms. We are sign readers and sign creators. We take in signs, interpret them, and in doing so we become and manifest new signs. Thus, a sign is always part of a system of signs (CP 4.55). We are swimming in thirdness, it pours in on us from all directions. The world is, after all, a profusion of signs and we are compelled to produce new thirdness, make new connections, form new theories, shape new paradigms, making all more and more intelligible at every moment.

Peirce is universally acknowledged as a significant player in the establishment of the science of semiotics, the science of signs. His semiotic vision runs through all his philosophical writings, and its importance for the development of his thought is undeniable.

Peirce made the study of signs his great life project. He defined a sign as something (the sign) which stands to something (its interpretant) for something (its object) in some respect or capacity (CP 2.228). A sign mediates between its object and its interpretant (“the proper significate outcome of

a sign” (CP 5.473)) and brings them into a certain relation with one another. He intended to define sign in the most general possible way, to convey that everything is a sign to some degree and in some respect, without going so far as to say that its being is exhausted in its being a sign. For Peirce, the world is a profusion of signs (CP 5.448 n.1), and everything in it is a sign, “every picture, diagram, natural cry, pointing finger, wink, knot in one’s handkerchief, memory, fancy, concept, indication, token, symptom, letter, numeral, word, sentence, chapter book, library” (cited in Colapietro 1989, p.3).

In the end, Peirce saw the action of signs in the world as universal, not just in communications between people, not just in human contemplation of the world, or even in the interactions of intelligences that are less than human, but everywhere in nature, whether individual intelligences are involved or not. He wrote, “Thought [i.e., the development of signs] is not necessarily connected with a brain. It appears in the work of bees, of crystals, and throughout the purely physical world; and one can no more deny that it is really there, than that the colors, the shapes, etc. of objects are really there” (CP 4.551).

Because of this, Peirce distinguished between the hermeneutical and semiotic aspect of meaning. According to Colapietro,

If we are to avoid nominalism, then we must distinguish between the *hermeneutic* level (the level of natural beings responding meaningfully to various complexes encountered in the empirical world) and the *semiotic* level (the level of intrinsically meaningful or inherently intelligible phenomena). The world of our experience—the world in which we position ourselves to various complexes—is always already a realm of meaning. (Colapietro 1989, p. 25)

TELEPATHY

In his discussion of communication, Peirce asks the question of whether his philosophy is favorable to telepathy. He says that at first sight it might seem unfavorable. “Yet,” he remarks (in his “Telepathy and Perception”), “there may be other modes of continuous connection between minds than those of time and space” (CP 6.159). To my knowledge, this is Peirce’s most positive remark on telepathy. Elsewhere (CP 7. 597-688) he says he does not feel enthusiastic about the telepathic hypothesis because it seems to refer to such a rare phenomenon—few people ever experience it—that it is almost impossible to work with it as a scientific possibility. Obviously, he was ill informed about the data, and I believe that had he known more, he would have seen telepathy as a hypothesis with true scientific value. I also believe that he must have had some rather limited notion of what Myers and Gurney meant by their theory of telepathy, since, as I will show below, he did believe that remarkable kinds of perception are well attested by human experiences.

Whatever Peirce might have thought of the theory of telepathy, he was quite positive about survival of death and the ability to communicate with departed spirits. He says that, unlike the hypothesis of telepathy, which, as an experience, happens to so few, the evidence seems to be that we *all* pass

through death to another world. For Peirce, the universal nature of this experience (as opposed to the rare phenomenon of telepathy) makes it a legitimate object for hypothetical speculation.

In regard to psychical research, Peirce found himself dissatisfied with what he read of it in the publications of the SPR. He was critical on two scores: 1) the questionableness of using telepathy as a overall explanatory idea, and 2) what he believed to be the wrong-headed way investigators used observations and statistics. He carried on a dialogue with Gurney about these matters, an exchange that ended with Gurney's death in 1888.

PEIRCE'S ALTERNATIVE

Peirce did offer, for the consideration of psychical researchers, an alternative theory to explain rogue phenomena related to perception (the telepathic and clairvoyant type). He develops his theory in an article, "Man's Glassy Essence," written for *The Monist* in 1892, appearing just three months after his article in the same periodical, "The Law of Mind." It is a theory that uses his basic conceptions of continuity, habit, and the law of mind, and he approaches the problem through a discussion of personality.

Peirce believed that cosmological theories should be verifiable through observation of the world as it is today. Psychical research had given evidence of extraordinary forms of perception and communications between persons, and as far as he was concerned, that type of phenomena was not only compatible with his vision of the origin and evolution of the world, but should actually be expected to occur. To give you some idea of how Peirce developed his theory in the 1892 article, I will have to back up a few steps.

The bulk of the ideas developed in "Man's Glassy Essence" came from Peirce's close study of protoplasm. He found this a most fruitful area of investigation because he believed that the presence of mind can be detected anywhere we can observe the operation of final causes, and in his opinion the behavior of protoplasm clearly reveals teleological actions which can be easily observed (although, as we have seen, he also perceived teleology at work in *all* existing things, not just those that we identify as "living"). For Peirce there was no question that *feeling* is operative in protoplasm, and in this sense interiority and consciousness, and that "it not only feels, but exercises all the functions of mind" (EP 1, 343). Now the presence of feeling cannot, says Peirce, be derived from the three laws of mechanics, and "it can never be explained unless we admit that physical events are but degraded or undeveloped forms of psychical events" (EP 1, 348). Wherever Chance/Freedom/Spontaneity are found, there, and in the same proportion, will be found feeling, which the inward aspect of chance. In evolution, wherever we find diversification, chance must be operative; wherever we find uniformity or regularity, habit must be operative. So that when we view a thing from the outside, considering its relations of action and reaction with other things, it appears as matter, whereas viewed from the inside in its immediate character as feeling, it appears as consciousness. (EP 1, 349).

Peirce tells us that we become aware of habits as general ideas, and if habit is a primary property of mind (as we have seen above), it must equally be so of matter as a kind of mind. The law of mind tells us that general ideas have the tendency to spread themselves, losing some degree of intensity of feeling, but gaining in generality and regularity. Therefore, says Peirce,

The consciousness of a general idea has a certain “unity of the ego” in it, which is identical when it passes from one mind to another. It is, therefore, quite analogous to a person; and, indeed, a person is only a particular kind of general idea....Every general idea has the unified living feeling of a person. All that is necessary, upon this theory, to the existence of a person is that the feelings out of which he is constructed should be in close enough connection to influence one another. Here we can draw a consequence which it may be possible to submit to experimental test. Namely, if this be the case, there should be something like personal consciousness in bodies of men who are in intimate and intensely sympathetic communion. It is true that when the generalisation of feeling has been carried so far as to include all within a person, a stopping-place, in a certain sense, has been attained; and further generalisation will have a less lively character. But we must not think it will cease. *Esprit de corps*, national sentiment, sympathy, are no mere metaphors. None of us can fully realise what the minds of corporations are, any more than one of my brain-cells can know what the whole brain is thinking. But the law of mind clearly points to the existence of such personalities, and there are many ordinary observations which if they were critically examined and supplemented by special experiments, might, as first appearances promise, give evidence of the influence of such greater persons upon individuals. (EP 1, 350)

Peirce then describes commonly noted incidents that indicate such community thinking and acting: “It is often remarked that on one day half a dozen people, strangers to one another, will take it into their heads to do one and the same strange deed, whether it be a physical experiment, a crime, or an act of virtue” (EP 1, 350). He then calls attention to the power of Christian gatherings that evince a common thought and a common goal, and points to the experience of “the whole state of Christ’s church militant here on earth,” that produces a great energy in its individuals and a sense of having a common “body”:

Surely, a personality ought to have developed in that church, in that “bride of Christ,” as they call it, or else there is a strange break in the action of mind, and I shall have to acknowledge my views are much mistaken. Would not the societies for psychical research be more likely to break through the clouds, in seeking evidences of such corporate personality, than in seeking evidences of telepathy, which, upon the same theory, should be a far weaker phenomena. (EP 1, 351)

This is as far as I can take this subject at the moment. For more on Peirce’s ideas about spiritualism, psychical research, and telepathy, see CP 6.495-521 (“Answers to Questions Concerning My Belief in God”), 6.548-556 (“Science and Immortality”), 6.569-587 (“Logic and Spiritualism”), 7.565-578 (“Immortality in the Light of Synechism”), and 7.597-688 (“Telepathy”).

IMMORTALITY

I conclude this paper with the full text of Peirce's little treatise "Immortality in the Light of Synechism." It ties his synechistic philosophy to human survival of death and in the process constitutes a review of some of the elements I have discussed in this paper.

PEIRCE'S "IMMORTALITY IN THE LIGHT OF SYNECHISM"

[This piece can be found in *The Essential Peirce*, Vol. 2, pp. 1-3 and in CP 7.565-578]

The word *synechism* is the English form of the Greek συνεχισμός, from συνεχής, continuous. For two centuries we have been affixing *-ist* and *-ism* to words, in order to note sects which exalt the importance of those elements which the stem-words signify. Thus, *materialism* is the doctrine that matter is everything, *idealism* the doctrine that ideas are everything, *dualism* the philosophy which splits everything in two. In like manner, I have proposed to make *synechism* mean the tendency to regard everything as continuous.

For many years I have been endeavoring to develop this idea, and have, of late, given some of my results in the *Monist*. I carry the doctrine so far as to maintain that continuity governs the whole domain of experience in every element of it. Accordingly, every proposition, except so far as it relates to an Unattainable limit of experience (which I call the Absolute), is to be taken with an indefinite qualification; for a proposition which has no relation whatever to experience is devoid of all meaning.

I propose here, without going into the extremely difficult question of the evidences of this doctrine, to give a specimen of the manner in which it can be applied to religious questions. I cannot here treat in full of the method of its application. It readily yields corollaries which appear at first highly enigmatic; but their meaning is cleared up by a more thoroughgoing application of the principle. This principle is, of course, itself to be understood in a synechistic sense; and, so understood, it in no wise contradicts itself. Consequently, it must lead to definite results, if the deductions are accurately performed.

Thoroughgoing synechism will not permit us to say that the sum of the angles of a triangle exactly equals two right angles, but only that it equals that quantity plus or minus some quantity which is excessively small for all the triangles we can measure. We must not accept the proposition that space has three dimensions as strictly accurate; but can only say that any movements of bodies out of the three dimensions are at most exceedingly minute. We must not say that phenomena are perfectly regular, but only that the degree of their regularity is very high indeed. There is a famous saying of Parmenides, ἔστι γὰρ εἶναι μηδὲν δ' οὐκ ἔστιν, "being is, and not-being is nothing." This sounds plausible; yet synechism flatly denies it, declaring that being is a matter of more or less, so as to merge insensibly into nothing. How this can be appears when we consider that to say that a thing *is* is to say that in the upshot of intellectual progress it will attain a permanent status in the realm of ideas. Now, as no experiential question can be answered with absolute certainty, so we never can have reason to think that any given idea will either become unshakably established or be forever exploded. But to say that neither of these two events will come to pass definitively is to say that the object has an imperfect and qualified existence. Surely, no reader will suppose that this principle is intended to apply only to

some phenomena and not to others,—only, for instance, to the little province of matter and not to the rest of the great empire of ideas. Nor must it be understood only of phenomena to the exclusion of their underlying substrates. Synechism certainly has no concern with any incognizable; but it will not admit a sharp sundering of phenomena from substrates. That which underlies a phenomenon and determines it, thereby is, itself, in a measure, a phenomenon.

Synechism, even in its less stalwart forms, can never abide dualism, properly so called. It does not wish to exterminate the conception of twoness, nor can any of these philosophic cranks who preach crusades against this or that fundamental conception find the slightest comfort in this doctrine. But 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.

Nor must any synechist say, "I am altogether myself, and not at all you." If you embrace synechism, you must abjure this metaphysics of wickedness. In the first place, your neighbors are, in a measure, yourself, and in far greater measure than, without deep studies in psychology, you would believe. Really, the selfhood you like to attribute to yourself is, for the most part, the vulgarest delusion of vanity. In the second place, all men who resemble you and are in analogous circumstances are, in a measure, yourself, though not quite in the same way in which your neighbors are you.

There is still another direction in which the barbaric conception of personal identity must be broadened. A Brahmanical hymn begins as follows: "I am that pure and infinite Self, who am bliss, eternal, manifest, all-pervading, who am the substrate of all that owns name and form." This expresses more than humiliation,—the utter swallowing up of the poor individual self in the spirit of prayer. All communication from mind to mind is through continuity of being. A man is capable of having assigned to him a *rôle* in the drama of creation; and so far as he loses himself in that *rôle*,—no matter how humble it may be,—so far he identifies himself with its Author.

Synechism denies that there are any immeasurable differences between phenomena; and by the same token, there can be no immeasurable difference between waking and sleeping. When you sleep, you are not so largely asleep as you fancy that you be.

Synechism refuses to believe that when death comes, even the carnal consciousness ceases quickly. How it is to be, it is hard to say, in the all but entire lack of observational data. Here, as elsewhere, the synechistic oracle is enigmatic. Possibly, the suggestion of that powerful fiction *Dreams of the Dead*, recently published, may be the truth.

But, further, synechism recognizes that the carnal consciousness is but a small part of the man. There is, in the second place, the social consciousness, by which a man's spirit is embodied in others, and which continues to live and breathe and have its being very much longer than superficial observers think. Our readers need not be told how superbly this is set forth in Freytag's *Lost Manuscript*.

Nor is this, by any means, all. A man is capable of a spiritual consciousness, which constitutes him one of the eternal verities, which is embodied in the universe as a whole. This as an archetypal idea can never fail; and in the world to come is destined to a special spiritual embodiment.

A friend of mine, in consequence of a fever, totally lost his sense of hearing. He had been very fond of music before his calamity; and, strange to say, even afterwards would love to stand by the piano when a good performer played. "So then," I said to him, "after all you can hear a little." "Absolutely not at all," he replied; "but I can *feel* the music all over my body." "Why," I exclaimed, "how is it possible for a new sense to be developed in a few months!" "It is not a new sense," he answered. "Now that my hearing is gone I can recognize that I always possessed this mode of consciousness, which I formerly, with other people, mistook for hearing." In the same manner, when the carnal consciousness passes away in death, we shall at once perceive that we have had all along a lively spiritual consciousness which we have been confusing with something different.

I have said enough, I think, to show that, though synecism is not religion, but, on the contrary, is a purely scientific philosophy, yet should it become generally accepted, as I confidently anticipate, it may play a part in the onement of religion and science.

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