

Peirce's Early Explorations in Triadic Metaphysics

Introduction

Beginning around 1855 and for six or so years thereafter Peirce began what was to be a life-long search for a method of generating ultimate metaphysical categories. His writings during this period are usually fragmentary. With so many tasks before him, he often starts one and then leaves it, only to start another and another, then returning again to earlier efforts. The new edition of Peirce's writings, to which I refer heavily in this lecture, now gives the student a better although not complete understanding of this early work. ((*Writings of Charles S. Peirce: A Chronological Edition*, Vol. 1, 1857-1866 (Bloomington: Indiana University Press, 1982) Page references to this edition will be found within parentheses in the body of the text.))

In this lecture I shall discuss Peirce's first steps to build upon or transcend the ideas contained works of Kant, Hamilton, and the other philosophers discussed in Lecture One. As so happens with a novice metaphysician the scope of some of Peirce's early writings is vast but unelaborated. We can only guess at times as to what he had in mind in some of the passages and essays to be considered. However, these early writings are extremely tantalizing because the reader comes away with the impression that Peirce has hit upon a systematic method of metaphysical speculation but has failed to share with his reader how he came to the method itself or why he has adopted it.

In this lecture I shall continue to develop, in more or less chronological fashion, Peirce's views on a knowledge and metaphysics: knowledge as a

relational matrix, metaphysical categories as names for reciprocal processes.

Knowledge, Wisdom, and Genius

What could be known about knowledge and the world? In asking this question, Peirce wanted to make a fresh analytic start, relying as little as possible upon established answers from the philosophical traditions he was schooled in. From the earliest of his writings he appears to have blended the inspirational epistemology of Emerson and Schiller with the analytic rigor of Kant into a provisional synthesis. Clearly, Peirce believed that the analytic reconstruction of the knowing process, as attempted by Locke and the British tradition, did not reveal the whole dimension of knowing itself. In this respect he was a transcendentalist in the best sense of the word. In 1853 he wrote: “Poets see common nature.”(4) Thus, poets do not analyze; they synthesize general aspects of experience by means of selection of significant aspects of particular experience. Although in his earliest writings Peirce does not focus on the poetic use of signs as the vehicle of poetic accomplishment, a belief in the existence of poetic or aesthetic knowledge would lead him, as it had Emerson, in the direction of contemplating the peculiar power of signs to stand for “common nature” and to allow metaphysical insights. In 1860 he wrote:

The terms of every proposition are presupposed to be comprehended; therefore no proposition can give us a new conception, and Wisdom is not learnt from Books.(5)

In the same day book Peirce wrote: “Every man his own Metaphysician.” (8) What Peirce seems to be saying is that you cannot know the end result of a knowing process without following the stages in the process that get you to the end

result. This is because, unlike any experience unmediated through signs, all knowledge at whatever level of immediacy must be presented in some semiotic form and always requires a series of interpretations. However, whether in the subjects of poetry or metaphysics, the vehicles of interpretation and communication are invariably insufficient to carry the full load of information required to achieve the desired purposes of comprehension and communication. In addition, there are a variety of ways to arrive at the same result. And yet, in spite of this variability, knowledge grows and communication converges. This suggests that conceptions are more than generalizations, and that signs contain a potency to direct thought. In the fashion, the vehicles of thought and communication are able to act as catalysts, directing interpretation into fruitful areas and recreating the original insights of the communicator. The human mind is a domain with a particular affinity for being influenced by catalysts. In the conventional human world these catalysts are signs. Even in the natural world “nature suggests and the mind thinks out the suggestion.” (9) This relational view of knowledge undermines the Kantian view that synthetic *a priori* knowledge is possible because it is based on the view that knowledge is always ongoing and approximate, always is partly true and partly false. Knowledge is not be mirroring of nature, but a resultant product of a series of interactive processes. Thus, Peirce treated error not as a failure of correspondence, but as a kind of moral and behavioral failure. In 1860 he wrote:

Observations may be wrong, but still it is not very likely they are quite the contrary to the fact, and as long as they are not, they are not essentially false; they only need additions and modifications... This fact, that human errors are always those which addition or amendment will rectify, has given rise to the common saying that “genius never errs” and to the philosopher’s boast “that science has never been in the wrong.” The fact is, essential error can only arise from perversion, from wickedness, or from passion.

Sincere and philosophic production have no other falsity than that which is inseparable from every human proposition. (5)

A mind unfettered by ego, passion, or perversity is one that is free to move within the matrix of relations and nodes, contemplating its objects, reflecting upon them, naming and renaming, building up theories, enriching experience. The activity of the natural mind is always engaged in some ultimately worthwhile endeavor, no matter how impractical at the moment it seems. Peirce does not in these passages express the ardent passion of Schiller — that only aesthetic insight and inspiration will save civilization from barbarism — but there is a passion to be found here nonetheless, a passion for the singular value of thinking for its own sake, not only to solve practical problems but as a playful activity that prepares the ground upon which future minds may play and be inspired as well.

Another aphorism located in Manuscript 55/891, S66 ((The Peirce manuscripts, originally numbered by Richard S. Robin, *Annotated Catalogue of the Papers of Charles S. Peirce* (Amherst: University of Massachusetts Press, 1967) were renumbered by Christian Kloesel in the *Writings* (see “Chronological List 1849-1866” in Vol. 1, p. 569) In this lecture I shall note the Kloesel numbering first, followed by a slash, and then the Robin numbering.

)), also written in 1860, expresses the relational theory of knowing, and the probable influences of Hamilton, in rather clear terms:

I have come to the conclusion that our primary conceptions are not simple but complex; that our elementary conceptions are not independent but linked complexedly together; that nevertheless properly speaking we have no a priorisynthetical propositions, and that axioms are only definitions. (8-9)

‘Simple’ or ‘elementary’ conceptions, being conceptions, are never really simple because they are always the combination of at least two things.

Historical British

empiricism arrived at simple impressions through analysis and subtraction, perhaps inspired by the belief that mental atomism could be the basis for a science of consciousness and correct thinking the way Newtonian material atomism could be a correct approach to physical science. This direction leads to an impoverishment of our repertoire of available relations.

Although the kinds of general things that physical and mental science discovered had proliferated as a result of work of the identifying microscope of atomistic thought, the ways in which these things interacted remained on a highly simplistic level: associationism in psychology and quantitative proportionality in physics and chemistry. Poetry and *Naturphilosophie*, on the other hand, attempted to enrich our repertoire of relationships, though each fell far short in its own way from creating a link to established science.

In the above remark, Peirce appears to suggest that our conceptions may be entirely conventional and constructed. This would not be the correct interpretation. Peirce did not believe the world is our idea in the sense of our ideas being the only world we know. Rather, conception is an activity that sets up relationships with an external world. Since the mind has in some fashion originated from the world it contains latent possibilities for certain kinds of interaction with the world. However, the mental journey is not predetermined. There are many forks in the road that necessitate guesses and decisions. Kant’s transcendentalism is rejected by Peirce as a mere wish for symmetry and isomorphism between the known and unknown, and the transcendental deduction is a bid too simple and contrived for Peirce’s liking. In his early writings Peirce appeared to be struggling with the idea that our knowledge is not at all like the ‘thing in itself’ it is supposed to be about. In 1859 he wrote: “However immense our science may become, we are only burrowing light into an infinitude of

darkness. Once an infinitude, always an infinitude.” (8) If knowledge is an accumulation of atomistic facts then an infinite universe will always be infinitely unknown. On the other hand, if knowledge can become increasingly general and theoretical then its capacity to comprehend an infinite universe increases as long as the universe itself is not affected by that increase in a manner that makes it more elusive. As he matured and became more of a working, experimental scientist Peirce leaned towards the second option throughout his life.

How does the habit of knowing take root? In a college essay on Schiller’s *Aesthetic Letters* Peirce identified a state of “infinite indeterminateness” that places the mind at a crossroads where it is required to make a decision how to proceed. Thus, begins the struggle to begin to inquire and think. But, how can habitual thought retrace its roots and regain the experience of the movement from proto-thought to thought? In these early essays, there is evidence that Peirce accepted the romantic view of thought as initiated by inspiration and acts of genius. He even imagined a practice of emptying the mind to experience the original state of thinking. A short analysis of this process is described in a brief paragraph written in 1856, when he was a teenager:

When the soul is in an active state the repetition or continuance of the same thought or notion (to be distinguished most carefully from many notions which leave to each little weight) will pass that notion naturally up through the soul.

But what puts the soul in this active state? Beauty. In this (which I shall term the Automatic) method of excitement, it is necessary that the patient notion should outweigh all others — which can happen in two ways: — First, by the superiority of the Notion itself [a thought is ceteris paribus Superior to an idea] and 2nd by the attention given to it.

In order that our Automatic Method may be of any use it will be necessary to devise some means by which in practice

All superior notions may be expelled

The principal part of the attention may be given to the patient.

That is to say

1st That the attention may be drawn from all other notions

(2nd) to the patient notion.

Now then we have decided that 3 things are to be done: 1 to render the soul sensitive and active, 2 to empty the attention, 3 to put the Patient Notion in. (6-7)

Ten years later, in his Lowell Lecture XI (1866) Peirce described the elements of consciousness as (1) *feelings* or elements of comprehension, (2) *efforts* or elements of extension, and (3) *notions* or elements of information, the latter being the union of extension and comprehension. In that lecture he writes: "Man has the power of effort or attention; but as we have seen that this is nothing but the power denotation, it is possessed by the word also." (496) 'Information' is also 'implication'. (465) If notions are hybrid forms of consciousness that result from feelings that encompass and efforts that seek out, producing a notional entity encapsulating that particular form of mental energy, what could *Patient* Notions be? If we must empty attention to receive the Patient Notion under the catalyst of the experience of Beauty, one explanation would be that this notion must come from another thinker, a primal, original thinker, God.

This theistic explanation of the 'first three seconds' of the Big Bang emergence of consciousness explains the next two passages following the one quoted above.

When a child burns his finger at the candle, he has not only excited a disagreeable sensation, but has learnt also a lesson in prudence. Now the mere matter cannot have given him a notion since it had none to give; therefore, it must have been God who at the creation of the world put this thought into nature. Now this heat was a form, and all powers are forms. And matter we know nothing of.

All forms are also powers, since to affect is to effect, and are therefore spiritual manifestations. If this is so every form must have a meaning. But since all phenomena are forms, all things must have meanings. The transparency of the drop of water must actually convey a meaning to our conscious affections as truly as the Whole Sea itself.

Prayer

I pray thee, O Father, to help me to regard my inmate ideas as objectively valid...

In the former passage we see the dynamic interpretation of matter put forward by Kant and *Naturphilosophie*. Since mind is action and motion it cannot know the inert. Therefore, all objects of knowing are inherently dynamic and since something cannot affect another unless the other is receptive to it, all affections are meaningful in some way. That fire produces prudence in the absence of a detailed calculation of probabilities, and against a background of sparse experience, could only result from the emergence of mind in an essentially and thoroughly meaningful universe. Mind only emerges when the universe has properties that permit mind to

know it ((This notion, described in recent years as the anthropic principle, will be a topic in a later lecture.)).

Of course, Peirce has opened himself to the criticism that he has merely postulated the existence of mental activity full blown in the form of the spiritual manifestation of God. This simple-minded theism did not satisfy Peirce for long. After all, as a scientist, he was resolutely interested in the details of any process he set about to study. Mental activity, whether God's or yours, would still need to be examined and the dynamics of what we commonly call 'experience' would have to be unraveled.

In 1859 Peirce wrote a short essay entitled "Analysis of Genius." The purpose of the essay is to refute the definition of genius given by Dr. Samuel Johnson: "A mind of large general powers accidentally determined in a particular direction." Peirce seems to reject the notion that the mind possesses general powers. Instead, the mind has faculties, each of which consisting of "an original power of doing a SPECIAL thing." (26) These faculties are connected in some manner with the complexity of organism. Peirce gives the following example: if the eye or ear were structured in such a manner as to process a greater or different range of vibrations than are presently allowed, we would be able to see and hear the effects of those vibrations. A change in the complexity of our organism would result in a particular or special change in our experience. But that is only true for organisms with the facility to see and hear in the first place: "we not only have bodily organs for receiving certain vibrations, but also in ourselves faculties of seeing and of hearing." (27) Seeing, remembering, recollecting, and imagining are always particularized experiences. So genius must always manifest the result of particular processes influencing particular faculties no matter how spectacular the manifestation may be. Thus, the genius of one person is relative to the deficiency of another. One possesses original powers the other does not possess. The lesson to be

learned from this essay is that although steeped in Kantian concepts in his early years, Peirce was beginning to move away from the assumption of a context-free mind, which could be abstractly dissected and described in terms of general functions — the “Understanding,” “Reason,” etc. The mind cannot possess general powers because the mind is always doing something particular, manifesting itself in one or another particular form, while encountering some other particular set of conditions. Of course, as we shall see in the following section, no true generals could be found on the cognitive level since cognition is always relational, consisting of an interplay of particularity and abstraction. In the “Analysis of Genius” Peirce emphasizes this:

I still cannot see how relative knowledge differs from knowledge in general. Knowledge of a thing is having it in my consciousness — not the thing itself surely — what then but something to which the thing is related? This related thing — this idea — is born of my consciousness and of the object — and was produced partly by the object partly by me; (28)

This notion of simultaneous generation of an idea by consciousness and the object of the idea is assumed in Peirce’s development of a metaphysical system of general categories. It is not a simple dyadic relationship, as we shall see, but one of embeddedness and ‘inworking’. Our ideas are linked complexedly together. However, there is more than one way to move between them. There is a gap of indeterminacy that poets call inspiration or genius. In fact it is really *attention*, a heightened state of mentality that is actively seeking to discover relationships by paying attention to the connections between things rather than the things themselves. In Peirce’s early days he may have apparently thought that this mode of thinking could not be learned or taught, and that it had to be experienced to be understood and perfected. Of course, as reflected in his

many later studies in logic and inference he devoted his life to proving himself wrong on this question.

The Categories of I, It, and Thou

In 1857, during his Junior year at Harvard, Peirce constructed the following diagram, something of an amalgam of Kant, Schiller, Hegel, and the Two Brothers:

Reason Faith	Goodness	Love of Order	Unity	Reality	Permanence
Affection Goodness	Beauty	Love of Men	Totality	Limitation	Causality
Sensation Hope	Truth	Love of World	Plurality	Negation	Community

Around this time, he had begun using the terms I, IT, and THOU to denote pervasive meta-categories, fundamental categories of categories. As noted above, Peirce used the term 'faculty' to refer to a power. Thus, the soul seems to be a system composed of energy and the ability to control or influence energy in a particular manner. The diagram suggests that the soul contains three dimensions, and processes its energy in one of three ways — through I-ness, Thou-ness, and It-ness — resulting in various modes of thinking and affection. Peirce suggests that separate classifications of the I-

impulse and I-faculty are possible; for in 1859 he writes: “I have elsewhere advanced the classification of the I-impulse, the it-impulse and the Thou-impulse, but that is not a classification according to faculties.” (8)

I am convinced that between 1857 and 1861 Peirce had conceived of a complex metaphysical system of interrelated and recursive categories encompassing all of being, thought, and action. I think that he relied upon that metaphysical vision to generate a series of fragmentary writings in which he attempted to reveal the slices and reflections of that system. One such writing (Manuscript 65/(917, 923, 919, 1571, 278, S66), Spring 1861) describes the relationship of I, IT and THOU:

Though they cannot be expressed in terms of each other, yet they have a relation to each other, for THOU is an IT in which there is another I. I looks in. It looks out, Thou looks through, out and in again. I outwells, It inflows, Thou commingles. I is self-supported, IT leans on a staff, THOU leans on what it supports. (45)

As the title of the manuscript suggests, these are ‘elements of thought’. We may say that they are names for certain kinds of mental activity: self-awareness, awareness of non-self, and self-reflection. But Peirce wants these categories to be cleaner and stripped down to as few associations as possible. If we follow his metaphor of ‘support’, the I needs no support — it is sui generis — and the IT is wholly supported. But how does the THOU lean on what it supports? I believe that Peirce is moving towards a key idea here, something paradoxical and perhaps as yet probably not fully understood by him; the notion of mutual affection. We can imagine a circumstance where *A* creates *B* so that *B* may assist *A*. Tools and children created by tool makers and parents immediately come to mind. Then if *A* protects and conserves *B* it makes better use of what it supports. Cared for tools serve better; the same with offspring. However, Peirce goes

further: *A leans* on what it supports. This is paradoxical and perhaps contradictory. For, the energy saved by leaning is lost by supporting. What is served by such a process which seems simultaneous and therefore contradictory? Peirce does not delve into this questions in this brief outline of a proposed and much larger treatise. What is clear is that he did not believe that the Thou evolved out of an I. The I, It, and Thou were supposed to be three different 'worlds' or 'persons' with nothing essentially in common. It was possible for one world to be seen in another from the perspective of a third. However, the perspective is never dissolved lost and marks the relationship between the other two worlds from the third. Peirce provides the following, of among several, cryptic remarks on this question: "The THOU of the IT contains nothing which either the IT of the IT contains, nor which the I of the IT contains. Nor have these anything in common with each other." (46)

In another brief essay, "The Modus of the IT," (Manuscript. 66/916, Spring 1861) Peirce makes a complete reversal, presenting a highly condensed argument to show that the IT does become THOU. Perhaps one way to account for the apparent reversal is to say that Peirce was vacillating between a Kantian subjectivism that explains the world in terms of mental categories as conditions of knowledge and consciousness, and on the other hand, a Hegelian absolutism which submerges and deduces consciousness within and out of non-conscious activity. The latter endeavor attempts to create a metaphysical description using the simplest categories of relatedness and as little else as possible. In this essay Peirce notes: "Consciousness is the only one of the worlds which is real and tangible to us. How shall sense become consciousness?" (47) Peirce's short answer is the following: "The relations of the triad being apprehended, it will be clear that which is in the sensible world can only enter the mental world by having in it a revelation which is in the abstract world." (47) The description of the three worlds in this essay takes this form: "1. That whose heaven is a

speck, or the manifold of sense, 2 that whose heaven is of extensive manifestation or the world of consciousness, 3 that whose heaven is of immense manifestation or the world of abstraction.” (47) Thus, to ask how sense becomes consciousness is to ask how the absolutely immediate in space and time can acquire extension and duration. In general terms this can only be accomplished through continual communication and guidance from the world whose manifestation is ‘immense’, the world of abstraction. In other words, to live in the world of common sense and everyday life is to be under the continued influence of an immense world of abstractions. Peirce gives the following answer which shall be outlined in the following separate steps, not necessarily in his own words but hopefully with his meaning, in order to display its components and formal, recursive elements:

- Revelation takes three abstract possible forms: pure sequence (temporal succession, arbitrariness), spatial connectedness (dependence), and origination (absolute dependence).
- Sensation is neither pure arbitrary sequence, nor origination. We sense or do not sense. We do not sense the in-between of what we sense. And what we sense is not something we make up. We do not experience the origination or coming to be of a sensation or image. When we imagine something it ‘materializes’ just as supposed real things do. We only experience the incremental coming to be of sensory images through art and the external manipulation of media. On the other hand, sensation is a spatial ‘speck’ with dimension greater than the infinitesimal and can be conceived as a unity of dependent parts. Why, then, is spatial dependence the mode of sensation? Why isn’t sensation exclusively temporal rather than existing as it appears, as something not inherently and exclusively governed by the passage of

time?

- Because sensation has a mode of existence that is neither purely random or arbitrary, nor purely necessary or absolute as is abstraction. It is both particular and general. Now if existence were purely arbitrary, sensation would not 'exist, since sensations seem to exist in themselves. Thus, existence *to us* takes the form of actuality. It is more than mere possibility or feasibility, but it is less than necessary existence. In other words, to say that 'sensations exist' is to grasp a mental conception of existence as a condition of actuality in contrast to possibility or necessity. Thus, if revelation is sensation to us, and if sensation is existence, why, then, is our mental conception of existence actuality? Why is existence a mental conception that is never manifested in sensory form but is nonetheless an absolute characteristic of each and every sensation, i.e., that every sensation always be present and actual?
- Because actuality is really an amalgam of possibility and a "necessary form of fact" or 'mode': "for mere feasibility to become actuality it must have in it a necessary mode." (48) Sensations are occasions and therefore not absolute in any universal sense of the word. However, they exist and so are more than merely possible. Thus, sensations and mental conceptions about them must contain some form of 'necessary mode'. Now, there are three kinds of necessary mode: mere *logical necessity* of arbitrary existence (existents) which form a collection, group, company, or community; *physical necessity* or dependent existence that is caused by something beyond itself; and self-dependent or *absolute necessity*, the mode of existence of quality, which Peirce gives the name 'influx'. Now, why aren't sensations or mental conceptions about them merely logical relations between arbitrary existents

collected together as a group? Why, then, in our experience must we think of existence always as something that has been caused?

- Because fortuitousness and community are acted upon through an influxual derivation or sequence that transforms the unrelated (arbitrary, fortuitous) into the related and dependent, or caused. Now, absolute necessity — influxual derivation — acts in one of three ways: as a possible modality which therefore achieves nothing (negation), as an actual modality acting to create something (reality); and as a necessary modality where possibility and reality are coextensive (infinity). Why, then, is influx actual and the derivation more than negation in order to create reality?
- Because “into the negation was worked an infinite quality.” (48) Reality cannot be purely particular. For something to be actual it must result from an influence of some infinite quality. Now, there are three kinds of infinite quality: unity, plurality, and totality; and of these only plurality belongs to the mental world, since even unity is plurality by continued existence and mentality is never static. Why, then, is sensation and mentality always qualitative and plural?
- Because unity combined with ‘total shape’ to produce plurality, many unities, each separate but also as one of many. For something to be a plurality it must be embedded in a set or context in which something about any one thing must be predicated of all others. This is what occurs when units are counted. Different things are included within a numerical matrix and a correspondence is set up. This matrix is an illustration of a ‘total shape’. Peirce explains:

Now shape is that subsidiary form which a thing takes up for sake of being itself form and which though not its true form exactly coincides with that. A total shape is one the diversity of which is so great that it ceases to have any diversity but every thing which has the shape has it in all its diversity. (48; emphasis added) Shape is a derivative form of something which 'coincides' with what it is a form

of. A total shape is one which is homogeneous and yet diverse; to have the shape totally is to have it in all of its diversity. Now, there are three total shapes: the totality of negative quality (a mere point, elementariness), the totality of real quality (extension), and the totality of infinite quality (immensity). Why does the mental world consist only of extended experiences, and not the others purely considered?

- Because elementariness becomes extension by taking on immense manifestation. Every extension is infinite in one respect, and finite in another. This is because it is capable, as something that has the capacity to reflect a total shape, of being represented by subsidiary forms of itself. It may be represented as infinitely dense and discrete or as continuously smooth and finite. Immensity is required for extension; put in another way, if there is to be extension, infinite qualities must be the source of the extension. Now, there are three immense manifestations: immensity as unitary shape (time), immensity as plural shape (space), and immensity as total shape (heaven). Therefore, “Time becomes space by conjunction with a heavenly world. That of consciousness. And this turns the IT to THOU.” (49)

Let us retrace our steps in this rather intricate transcendental argument. Peirce set out to answer the question ‘How shall sense become consciousness?’ This question assumes that sense may be nonconscious. This is conceivable if we imagine a sensory system that is able to receive and process information, but is unconscious throughout the process. Peirce’s simple answer to the question is: ‘Sensations become conscious when they join in some manner with revealed abstractions.’ Peirce then tells us that ‘revelation’ is a Russian-doll process, an unfolding by means of a rubric following the same triadic process: *abstract unity* combined with *concrete plurality* to produce *concrete unity*. The abstraction achieved

at each stage requires a deeper abstraction as a condition for achievement at that stage.

In his argument refers to (1) *forms of fact*, (2) *influxual derivations*, (3) *infinite qualities*, (4) *total shapes*, (5) *immense manifestations*. The pointalistic activity of a sensation, regarded in British empiricism as 'impressions', is filtered through a prism of abstractions which produces "subsidiary forms" of the sensation. The IT of unconscious sensation becomes the THOU of conscious sensation. Has Peirce cheated here by positing the existence of a conscious 'world' or 'heaven' that touches the IT world and gives it conscious life.? If he has, he has done no worse than Kant. For Peirce has tried to establish the condition for the possibility of our sensory and thinking life carried on in a word of space, time, and memory. And what he is saying is that such experience cannot be accounted for without the operation of something like what is referred to in the five categories just listed.

The 'Long List' Attempted

The I , It , and Thou were the unifying theme for Peirce's many attempts to construct a detailed system of categories, and a method of generating additional categories, right after graduating from Harvard. "The Modus of the IT" was once such attempt. Another is a brief, but tantalizing essay, also written in 1861, entitled "Analysis of Creation." This work makes no mention of the I, IT, and THOU, but it contains a wealth of other notions, used with little or no explanation that follow the argument of "the Modus of the IT." Again, Peirce asks: "How shall abstraction be combined with manifold of sensation?" (85), that is, with "the perfectly unthought manifold, of sensation." (85) The answer: by existing as a form for matter, as *expression*. Now Peirce attempts to show how this combination of form and matter is achieved so as to allow sensation to become thought:

Formula of Thought. 1 Whence is B. 2 B pure simple perfect is A. 3 A is no longer B Why. 4 A to become B must be joined to B in its null form C. What C is. 5 What is the process by which A is combined with C? It is B-2ndnd[superscript]. (85)

This passage suggests Hegel's reasoning on the dialectic of identity: Identity implies difference which nullifies identity. It also suggests Spinoza's 'Every determination is a negation'. Let us try to follow Peirce's reasoning using 'X expresses Y' rather than 'X is Y'. A is something that stands for, or stands in for, or substitutes for, or expresses B in every possible circumstance ('purely, simply, perfectly'), so that 'Whenever A, B' and 'A expresses everything possible about B' are both true. However, not everything that can be expressed about A is A's expression of B. A is something 'more than' or something 'else besides' B, otherwise we would not be talking about A and B; and for it to just be an expression of B it must exist in a stripped down form: A-only-as-an-expression-of-B. But now if B is expressed by A which is suddenly seen as less than what it is, when not an expression of B, then A is, as an expression of B, something else, namely C, and is limited by B by virtue of being an expression of B. Thus, the thing about A that makes it an expression of B is something *about* B itself, but not B itself, and that something Peirce calls B-2ndnd[superscript]. Linking the two essays, we may call C a subsidiary form of B.

I suspect that in this passage Peirce is seeking to clarify or, perhaps, think through on a more profound level, the Kantian relationship between sensations and representations (*Vorstellungen*). In the *Critique of Pure Reason*, Kant argued:

Whereas all intuitions, as sensible, rest on affections, concepts rest on functions. By 'function' I mean the unity of the act of bringing various representations under one common representation. Concepts are based on

the spontaneity of thought, sensible intuitions on the receptivity of impressions... Since no representation, save when it is an intuition, is in immediate relation to an object, no concept is ever related to an object immediately, but to some other representation of it, be that other representation an intuition, or itself a concept. (Critique of Pure Reason, p. A68, B93)

‘Affection’ as Kant uses the term, seems to refer to a mode of activity whereby the mind is influenced by itself, regardless of the specific content of thought or sensation, and is influenced in a particular way. This particular way he has described as ‘positing’ (*Critique of Pure Reason*, p. B68), or ‘attention’ (p. B156n). Affections are elementary relationships, described in Kant’s second Transcendental Deduction as an ‘original power’ of combining the manifold of intuition into something to be provided in a quasi-digested form to the understanding for discursive processing by the functions or categories. This act of productive rather than reproductive imagination admits of no deeper explanation. It is just the way things are and anybody may notice this by reflecting on their own self-consciousness. The combination of my continuous ‘selves’ in the stream of my consciousness is the bare form of this primordial combining activity that occurs in an act of spontaneity of the faculty of representation. (*Critique of Pure Reason*, p. B130)

The interesting problem for students of Peirce is trying to figure out whether he believed that Kant erred in postulating a ‘faculty of representation’ and should have dug deeper, or whether Peirce was just attempting to give logical clarity to this spontaneous synthesis in the form of a ‘formula of thought’. The parallel in the two passages from Kant and Peirce quoted above is found in the notion of an emergent tertium quid when two things attain connection. Peirce was probably not satisfied with talk of original, spontaneous powers. Neither were the immediate post-Kantians, Schelling

and Hegel. Like the Objective Idealists, Peirce may have been seeking escape from the Kantian 'torch in a dungeon' (Schiller) by proposing a grander, non-egocentric 'analysis of creation' itself, by carrying the transcendental deduction a step further.

Let us look closely at the 'Analysis of Creation' to detect its underlying transcendental argument. In that essay Peirce asks: "Whence is expression? That is[,] what are the conditions of its existence?" His answer is that expression is possible when meaning and language are able to combine to express the meaning. Meaning is 'ideal form' as would be expressed free of the extaneous and accidental. Language is 'partial form'; and the combination of language and meaning, expression, is a 'realizable form'.

But what is it about language that suits it as a vehicle for expression? How is language possible? It must have a 'regulative' capacity, Peirce says, something that comprises a rule-governed set of items whose form must be suited to the meaning to be expressed. Human language is but one manifestation of language. Any collection of items may comprise a language if the items in the collection can be arranged in some sort of regular sequence. The relationship is what counts. When the Rosetta stone was discovered its three-tier structure suggested the existence of relationships, and that suggestion allowed other relationships to be detected and thereby meaning eventually was released from the accumulation of relationships. It should be kept in mind that Peirce uses 'language' broadly, as I have suggested. For example, the minds and hearts of lovers create a language capable of expressing a meaning "which regulates them by virtue of their ratio." (87) The animal kingdom is a language: "the four types are the regulations of that Language by the Meaning." (86) Another example: "The human life is a language. The

[human] character is the regulation by the meaning, which is the principles [sic] of action.” (87)

In Manuscript 71/1105 Peirce writes:

language is an abstraction not capable of realization alone, but combined (in a way of which we shall think directly) with other abstractions gives them realizability. Geometrical figures, letters, conversations, music are such languages. We seem to see there analogues in Vegetables, Animals, Chemical Compounds, Nebular systems, etc.

What does it mean to say that the animal kingdom is a language? What is the ‘meaning’ of the animal kingdom? Should we not dismiss the question out right as merely a misuse of language, a category mistake? Perhaps, if it were possible to visit a variety of animal kingdoms in our nearby universe, our own might very well be seen to have certain peculiarities or characteristics about which it would be plausible to say something about the ‘meaning’ of animal life on this planet; just as the way different cultures organize themselves politically may be explained in terms of what it means to be a member of each culture. We are used to thinking comparatively and sociologically in the latter case and try to explain cultural traits in terms of their meaning. In the case of an animal kingdom, we just do not have alternative animal kingdoms with which to compare our own, side by side, Rosetta-stone-like. But we could easily imagine an alternative insect world with complex forms that do not send auditory signals, but just bump into each other; and this would suggest by comparison an interesting trait about our own insects, perhaps that our insects were designed to send complex signals and that such transmission was a part of some sort of meaning or purpose of our insects.

Peirce next asks: 'What is the regulation that makes language express meaning?' The answer is: a capacity or element of a language that is unaffected by the meaning the language is formalizing. Perfect regulation — 'normality' Peirce calls it — is the regularity of a meaningless language, if we may conceive of such an absurdity. It is the limit of the most abstract system of relations, comprising a formal system, that itself is meaningless, or incapable of conveying meaning. It would be a language without grammatical forms, Peirce says. Or lovers who have lost their separate identity and become one. It would be the 'life' of a robot and not human life of a person struggling to harmonize character and action. To maintain expressiveness language must have a stable component, which Peirce calls the 'diflection' in the regularity of language. Spoken language requires syllables. Plurality requires a stable background medium. The types of the animal kingdom must be based upon classes. Love requires different natures. Peirce observes: "By diflection we do not mean the diametric element, itself, of language but the influence, the inworking of this element." (88)

Perfect diflection is equivalent to the absence of any diflection. Both involve the absence of boundaries. A boundary connects and separates what is on either side of it. This is easily comprehended on a two-dimensional surface such as a map. It is much more difficult to comprehend the same concept when applied to a process such as human speech or the ontogenetic development of the animal kingdom. So, let us consider the way Peirce describes this relationship in some of the examples he has been using:

If we make the interspace between the dots absolutely unbroken, the result is the same as if there were no interspace. If a body has no resistance, forces can no more influence it than if it had absolute inertia, and one conception contains the idea of force no more than the other. If there were no peculiar laws of language per se we should have the same inarticulate

result as though language were wholly influenced by laws for itself. If the body is absolutely under physical and physiological control there is no more gesture than if there were no fixity of body at all. If the mind tries to turn to the Manifold of sense wholly there is the same negation of thought that there would be if it trying to turn wholly to the Absolute... If human frailty were absolute we should be mere machines, so we should if human principles were absolute. Lovers would be as indifferent if they had nothing in common as they would if they had everything in common. (88)
((According to Max Fisch, Peirce began romancing his wife to be, Harriet Melusina Fay, around 1860-61, who was boarding at the Agassiz School for Young Ladies across the street from the Peirce residence in Cambridge. They were engaged and married in 1862. This may have been the stimulus for Peirce to think about the meaning of love.))>

Some of these statements look very much like tautologies. That may be because they describe a relationship that involves a boundary from the perspective, respectively, of each side of the boundary. A tautology has that form as well. A collection of dimensionless dots separated by interspace requires that the interspace be broken by the dots. In this example the relationship between the dots is one of spatial dimension (length). This length must be finite in order to fix the relationship between any two dots. To make the length infinite is to disperse the dots infinitely and is the equivalent of collapsing all dots into a single dot, thereby also negating plurality. In the next example the relationship is one of force. The effect of force is the boundary between inertia and force. No boundary is established where the force meets no resistance, and the same is true when a force meets complete resistance. In the example, regarding language the relationship involves communication as an articulation of linguistic symbols. Here Peirce seems to be saying that a language without syntax and semantics could not serve the function of conveying information; only noise would result, or perhaps, random signals. A

dictionary could not be devised. On the other hand, a language that had its own self-executing laws could not be adaptable as a system of symbols for use in communication. A paralyzed person may not make gestures any more than a person subject only to random bodily motion. In this case the relationship involved is one of articulated bodily gestures.

Peirce describes the general rule governing the above illustration as follows: “Obviously the diflection perfect and the diflection null are to be combined by coordination. But as one of these is coincident with the tendency of the meaning and the other opposed to it, this coordination is tantamount to an ordination in the meaning expressed.” (88) Ordination is the ‘degree’ of diflection, a sort of quantification of the qualitative result of diflection. It describes how much diflection is possible in the particular framework and sets ranges and limits. Among the examples given by Peirce: “A limited amount of virtue is attained by a frail being... A limit to love is the incompatibility of natures... The Types of the animal kingdom are limited by the Classes to certain orders.” (89)

Ordination exists, and probably only exists, between the poles of the null and the pure, simple, perfect forms of ordination. The latter is the functional equivalent of the former. At the limits only “inordination” results, which Peirce describes as a limit of conceivability. For example, in plurality the dots would be too numerous to be conceived; in dynamic interaction of forces the influence of an “inconceivable [large?] force” would render the inertia “inconsiderable.” (89) Regarding language, commonly understood, Peirce writes: “The language would possess a machinery but it would be utterly inadequate to express the meaning.” (89) How can this be, if ordination is a condition for the expression of meaning through language? Why ‘utterly’ inadequate? Why not just inadequate? To give any plausibility to these remarks we should probably assume that Peirce does not mean to speak of a language in the sense of a more or less adequately functioning

system of signs, but only as something that looks like a language but has no expressive capacity.

Ordination is kept between its extremes through coordination:

“Centralization, formity, conformity, must be the process by which Inordination and coordination unite to form ordination.” (89), thereby appearing to contradict the earlier assertion that coordination was “tantamount” to ordination. The focus is shifted from the perspective of what is on either side of the boundary, to a view that includes both sides and the boundary itself. Thus, plurality is achieved by conceiving of the dots as a group. Force is seen as the motion of a mass, which is both the cause and effect of force.

The brief outline of the unfinished arguments in “The Modus of the IT,” and “Analysis of Creation” just given, two essays printed in Volume I of the *Writings of Charles S. Peirce*, does not adequately indicate the scope of the effort Peirce made to develop a long list of categories. When looked at as a totality the various published and unpublished essays suggest the following about Peirce’s early system of categories: (1) Peirce divides the universe into eight realms (worlds, logoi, existences, forms of fact, derivations, qualities, shapes, and manifests); (2) each of these realms has a different form depending on whether they operate in the worlds of the I, IT, or THOU; (3) although the classification of the categories in many unpublished drafts is fourfold, following Kant, into metaphysical, dynamical, mathematical, and physical, the action of the categories is continuous and triadic. If the relationship between categories were to be visualized, perhaps the most appropriate shape would be that of an expanding torus. In Manuscript 65/278 Peirce drew seven concentric circles trisected by three lines, each labeled, respectively, I, IT, or THOU. A possible clue to the meaning of the seven circles may be found in Manuscript */273, where Peirce compiles the following list:

	Thought		
(Kingdom)	Expression	(Type)	Regulation
(Class)	Diflection		
(Order)	Ordination		
(Family)	Conformity		
(Genus)	Particularization	(Species)	Materialization
	Individuation		

Perhaps the seven concentric circles correspond with the seven levels of biological classification. In “The Modus of the IT” Peirce described seven stages in the process whereby abstractions combine with sensation to become consciousness:

- abstract revelation
- absolute existence
- necessary forms of fact
- influxual derivation
- infinite quality
- total shape
- immense manifestation

In *Evolutionary Metaphysics* ((Joseph L. Esposito, *Evolutionary Metaphysics: The Development of Peirce’s Theory of Categories* (Athens, Ohio: Ohio University Press, 1980).)), I diagrammed the argument from “The Modus of the IT” as follows:

Peirce attempted many diagrams of the worlds of the I, It, and Thou. One, dated June 1, 1859 and entitled “Diagram of the IT,” was reconstructed and

printed in the *Writings*, (530), with the enchanting form of pin wheel. The diagram illustrates the underlying structure of how the categories are generated — always through triadic bonding. There is also evidence in the unpublished manuscripts that Peirce was interested in developing a system of abstract notation to be used to generate more complex categories through computational activity, much in the spirit of Leibniz's 'universal characteristic' (Manuscript 64/923 S-66)

The Underlying Schema of the Long List of Categories

In *Evoluntary Metaphysics* I attempted to generalize on Peirce's schema and derived a circular system of eight categories: Abstract One, Abstract Universals, Concrete Universals, Abstract Relations, Concrete Relations, Abstract Shapes, Concrete Shapes, Concrete One. These categories are generalizations of the list of nine categories given above in bold type, and from Manuscript */273. These become eight when heaven and abstraction, or thought and individuation, are equated. Since the triadic unfolding is not literally circular but dialectical and equivalence is not reached, Hegel's criticism of Schelling's 'system of identity' is avoided.

However, our focus at this point is on the nuts and bolts of the categorial engine. What enlivens and gives it energy? If the categories are supposed to be able to depict the multifarious activity of the 'Whole Sea' and the 'celestial worlds' what is the elementary particle theory, so to speak, underlying them? In the essay "SPQR" dated 1861-1862 Peirce labeled his new philosophy 'idealism' and described relations dynamically:

View the world first with the relations of things in it as all one momentary thing. How is it with the relations now? They are purely formal, forceless. Let us now introduce time. Now from one fact another follows in time; the relation is now real and forcible. The further we go back in time the more

and more is the cause the origin of the effect, the greater and greater is the dependency through there being more and more Spiritual Exhibition, 'till we arrive at the first cause... Now what is time that it should enable a spirit a-hold of matter and by it in connection with another spirit to communicate itself thereto? It is action-room, is it not? (92)

Time is not merely in quantitative measure. It is a measure of possibility and feasibility. If relations are forcible they cannot be reduced to a relationship between matter and motion as is done in Newtonian physics. The variables of physics — space, time, matter — cannot explain force, affinity, attraction, or communication, Peirce seems to be saying. The derivation of hierarchies of concatenated triadic categories assumes that governance or regulation exists at every level in nature. At this point Peirce believed British empirical philosophy could not show the way:

WHAT IS REASONABLENESS THAT IT SHOULD GIVE VERITY TO FORM OF FACT? That is a Question! Now you see we come to something new, — new to the school of philosophy from which we have emerged. We have risen to a Cartesian, Platonic atmosphere — quite above the conceptions of Aristotle, Locke, or Hamilton. Express the answer to this question how you please, you must give utterance to idealism. The identity of mind and matter [is] that they are the same thing from different points of view. (93)

Some of the constituents of this “Platonic atmosphere” are found in Manuscript 54/988 entitled “Metaphysical Axioms and Syllogisms” which consists of an outline of ‘axioms’ Peirce apparently derived from his readings of Plato. Some of those derived from the “Phaedo” are:

Ax. 7: There cannot be a gap in time in the existence of a substance.

Ax. 8: Every event arises from its contrary.

Ax. 12: We have ideas of abstract qualities.

Ax. 15: All things possessing qualities, possess them by virtue of a partial manifestation of the abstract quality.

To what extent did these assumptions or ‘axioms’ provide a basis for Peirce’s search for a long list of recursively generated categories? How does an event arise from its opposite? And why must it? In the years after 1860 Peirce did not directly answer these questions. Instead he began to focus more and more on a particular kind of triadic relationship, the sign relationship, as perhaps a more fruitful substitute for the short-list relations of I, IT, and THOU. He did not abandon his metaphysical quest. In the following lecture we shall look at Peirce’s early theory of signs, not as a beginning of his semiology, but as a continuation of his triadic-perspectivist metaphysics.