## Classical American Pragmatism: A Systematic Overview

O pragmatismo americano clássico: uma visão geral sistemática

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**Abstract:** Throughout its history, pragmatism has served as the bearer of an unsystematic welter of philosophic insights from which varying movements or individuals could abstract bits and pieces as these were seen to serve the cause of their respective, often conflicting, philosophic claims. One common result to be found in these conflicting uses of pragmatic doctrines is a loss of the distinctively pragmatic philosophic vision which defies assimilation and which dissolves in the dismembering of its parts. What such endeavors further have in common is a failure to adequately recognize the nature of the scientific method to which pragmatic thought is linked and which provides the key to the unity of its systematic vision. It is this key which the present paper proposes to use to explore, in broad outlines, the depth and breadth of the pragmatic vision as offering a unique well structured and systematic conceptual paradigm.

Key-words: pragmatism, philosophy, scientific method, system, paradigm.

**Resumo:** Por toda a sua história, o pragmatismo serviu como o suporte de um turbilhão assistemático de *insights* filosóficos, do qual movimentos ou indivíduos variados poderiam abstrair pedaços ou partes quando se considerava que eles serviam à causa de seus respectivos, em geral conflitantes, argumentos filosóficos. Um resultado comum encontrado nesses usos conflitantes das doutrinas pragmáticas é uma perda da visão filosófica distintivamente pragmática que desafia a assimilação e que se dissolve no desmembramento de suas partes. O que tais esforços possuem ainda em comum é um fracasso para reconhecer adequadamente a natureza do método científico ao qual o pensamento pragmático está ligado e que fornece a chave para a unidade de sua visão sistemática. É essa chave que o presente artigo se propõe a utilizar para explorar, em linhas gerais, a profundidade e a dimensão da visão pragmático esta oferece um paradigma único, bem estruturado e sistemático.

Polovros-chove: pragmatismo, filosofia, método científico, sistema, paradigma.

The ongoing saga of unveiling the significance of classical American pragmatism – the movement encompassing the thought of Charles Peirce, William James, John Dewey, G. H. Mead, and C. I. Lewis – has been long and complex. Pragmatism is, of course, that philosophical movement which is most distinctively American. Yet,

the distinctively American flavor of pragmatism has been the very factor which has tarnished its respectability in many philosophic circles. The language of American practicalism, in which its philosophic ideas have been frequently couched, has too often hidden from view the depth and breadth of its insights as a response to enduring and deeply rooted philosophic problems. The systematic import of pragmatism has been further hidden from view by the fact that neither the founders of pragmatism nor their critics were in agreement concerning either the origins or the doctrines of pragmatism. Thus, there was held to be no one "pragmatism" but many pragmatisms embodying various doctrines and ideas. Further, though there was a variety of doctrines and ideas, such a variety was seen as quite limited in scope. Discussions of pragmatism usually centered mainly on problems of meaning. truth, and method, while other vital philosophic issues discussed by the pragmatists were seen as extraneous to, at times contradictory of, their pragmatic assertions. Gradually, amid the confusions of the meaning and import of pragmatism, interest in it began to wane, the position came to be viewed as outmoded, and it was virtually laid to rest. It is perhaps symptomatic of the status given to pragmatism within the philosophic community in the not too distant past that the author of a comprehensive book on the pragmatic movement thought it necessary "in these days when pragmatism in unfashionable," to justify putting it "in the company of the great philosophers of the past."

Pragmatism is again fashionable, quite fashionable in fact. But, unhappily, the philosophic role of pragmatism, in asserting its renewed vitality within the context of the contemporary philosophic scene, is the same recurring role which has been foisted upon it throughout its philosophic history – before its death, after its resurrection, out of fashion, and in fashion. That role has been, by and large, to serve as the bearer of an unsystematic welter of philosophic insights from which varying movements or individuals could abstract bits and pieces as these were seen to serve the cause of their respective, often conflicting, philosophic aims.

The one common result to be found in these conflicting uses of pragmatic doctrines is a loss of the distinctively pragmatic philosophic vision which defies assimilation and which dissolves in the dismembering of its parts. What such endeavors further have in common is a failure to adequately recognize the nature of the scientific method to which pragmatic thought is linked and which provides the key to the unity of its philosophic vision. Indeed, the first problem can perhaps not be separated from the second one, for the understanding of a philosophic method is a crucial key to understanding any philosophic position. It is this key which the present paper proposes to use to explore, in broad outlines, the depth and breadth of the pragmatic vision.

Before turning to a positive analysis of the implications of the pragmatic understanding of scientific method, it will be useful to clarify to some extent what this method does not imply, since past interpretations of pragmatism have been largely influenced, at least implicitly, by the respective understanding of the relation between pragmatism and science. The tendency to conflate the pragmatic focus on scientific method and the context of naturalism in which it is embedded with some form of reductionism has been widespread. This is perhaps nurtured by the general fact that the method of gaining knowledge which was the backbone of the emergence of modern science was confounded with the results of the first "lasting" modern scientific view – the Newtonian mechanistic universe. Thus, a naively realistic philosophic interpretation of scientific content, based on a spectator theory of knowledge and a resulting inadequate understanding of scientific method, led to a world view which gave rise to a quantitatively characterized universe and to either dualistic causal accounts of knowledge in terms of correlations between mental contents and material objects or reductionist accounts in terms of stimulus-response, with the complete rejection of mentalistic terms.

In rejecting the spectator theory of knowledge, and the illicit reifications to which it gave rise, pragmatism rejects the philosophic abstractions of Cartesian dualism. Humans, for the pragmatist, are within nature, not outside of nature and causally linked to it. They do not perceive mental contents somehow caused by physical particles. They do not, through introspection, arrive at something "inside" which has been caused by something "outside." In brief, not only Cartesian dualism, but also the entire philosophical baggage with which it became linked is rejected by pragmatism. Such a rejection, however, when interpreted in the light of the Modern World View, can be glibly read as a type of metaphysical reductionism. If humans are part of nature, then they are reducible to nature. And, the model for understanding their relation to nature, since it is not that of mental contents causally linked to physical particles, must be the behavioristic model of stimulus-response in one of its several versions, or at best some more general, causal genetic account of the origin of knowledge. Furthermore, since the empiricist account of knowledge within this context begins with atomic units as the building blocks of meaning, this type of epistemic reductionism is implied as well.

Though the reductionistic interpretation of pragmatic doctrines has happily began to wane, yet the focus on causal analysis in one of its several forms as the keystone of naturalism and of scientific method has not. Thus, phenomenologists, because of their own rejection of causal accounts of knowledge, generally tend to attack or at best ignore those aspects of pragmatic thought which touch upon scientific method. Recent claims that epistemology should be naturalized go hand in had with a causal theory of justification in terms of causal processes that produce psychological belief-states that are true. Further, this type of analysis is held to be patterned after scientific inquiry and theory construction. Epistemology thus becomes dependent on scientific inquiry, and scientific inquiry, like naturalism, centers around doctrines of causal analysis.

However, the above understandings of scientific method have still not ridden themselves of the confusion of scientific method with scientific content to which pragmatic naturalism so strongly objects.<sup>1</sup> While claiming to be patterned after the method of scientific inquiry, they are in fact using the contents of particular sciences

<sup>1.</sup> This stress on pure method is not intended to deny that pragmatism is influenced in its philosophical claims by the findings of various sciences. Indeed, it pays careful attention to these findings. However, the model of scientific method, as pure method, to which pragmatic philosophy is inextricably linked, is one thing. Its attention to various findings of various sciences achieved by the general method is something quite different. These two issues should not be conflated.

in attempting either to interpret or to build a philosophical claim. Indeed, causal connections are expressed as relations among particular types of objects or events, and the nature of the events or objects being connected enters at least implicitly into the understanding of the very nature of the causal relationship sustained. This focus on scientific method still not purified of content represents a lingering influence of Modern World View thought, is contrary to the pragmatic focus, and provides the basis for misrepresentations of the pragmatic concern with scientific method as at least implicitly reductionistic in some sense.

Recent discussions of pragmatism which, conversely view it in isolation from its concern with scientific method as the model for gaining knowledge, lose its constructive phase as a restructuring of traditional philosophic problems and alternative solutions and view it only in its role as critic of philosophical attempts to solve problems by providing wrong answers to wrong alternatives. Finally, even those most immersed in the spirit of American pragmatism often tend to view it as limited, by its linkage to the nature of scientific inquiry, to a theory of meaning and truth. The following approach, by contrast, will examine the pragmatic focus on scientific method to indicate the nature of the pathway this carves toward a full blown speculative philosophic vision.

What, then does the pragmatist find when examining scientific method, or lived experimental activity, as the model for understanding the nature of knowledge? The beginning phase of scientific method, not as a formalized deductive model, not as a metaphysical enterprise illicitly reifying supposed ultimate truths, but as lived experimental activity, exemplifies human creativity. The creation of scientific meanings requires a noetic creativity that goes beyond what is directly observed. Without such meaning structures there is no scientific world and there are no scientific objects. A focus on such creativity will reveal several essential features of scientific method.

First, such scientific creativity arises out of the matrix of ordinary experience and in turn refers back to this everyday primary experience. The objects of systematic scientific creativity gain their fullness of meaning from, and in turn fuse their own meaning into, the matrix of ordinary experience. Though the contents of an abstract scientific theory may be far removed from the qualitative aspects of primary experience, such contents are not the found structures of some "ultimate reality" but rather abstractions, the very possibility of which require and are founded upon the lived qualitative experience of the scientific. Further, the return to the context of primary experience is never a brute returning, for in such a return to everyday primary experience the richness of experience is fused with new meaning. Thus, the technical knowing of second level reflective experience and the "having" of perceptual experience each gain in meaning through the other. Moreover, the model of scientific inquiry in its functioning both between and within these two levels, as itself an object of philosophic reflection, will be seen to allow the method as operative at each level to gain enriched meaning through the other.

This illumination can begin to emerge by turning to the second implication of creativity as the starting point of scientific reflection, the resulting intentional or interactional unity between knower and known. As Dewey well captures this in discussing the significance of Heisenberg's principle of indeterminacy, "What is known is seen to be a product in which the act of observation plays a necessary role.

Knowing is seen to be a participant in what is finally known."<sup>2</sup> Further, either the position or the velocity of the electron may be fixed,<sup>3</sup> depending upon the context of meaning structures in terms of which the interactions of what exists are grasped. Thus, both perception and the meaningful backdrop within which it occurs are shot through with the intentional or interactional unity between knower and known. Using this characteristic of the model of scientific methodology in understanding primary experience, Dewey can observe, "What, then, is awareness found to be? The following answer . . . represents a general trend of scientific inquiry . . . it means things entering, via the . . . organism, into a peculiar condition of differential—or additive—change."<sup>4</sup> As Peirce emphasizes the same point, the creative abductions of scientific endeavors "shade into perceptual judgements without any sharp line of demarcation between them."<sup>5</sup> Or, In Mead's terms, experimental method is embedded in the simplest process of perception of an object.<sup>6</sup>

In brief, for the objects of everyday perceptual experience, as for the objects of science, the role of the knower enters into the object known; there is, on both levels, an intentional unity between knower and known. And, true to the reciprocal relation established above between the objects of secondary and primary experience, the dynamics of primary or everyday perceptual experience disclosed with the help of the model of scientific method in turn help make more meaningful the model itself. Thus, Lewis clarifies the noetic creativity ingredient in scientific objects by turning to common sense objects to understand the nature of "thinghood" common to both levels,<sup>7</sup> while Dewey, in his discussion of the dynamics of everyday perceptual awareness, asserts, in clarifying the model, that the scientific object "marks an extension of the same sort of operation."<sup>8</sup> Such dynamics of perceptual awareness, however, lead to a further characteristic of the model of scientific method.

Turning to a third feature of scientific method, it can be seen that such a creative noetic structuring of experience brings objects into an organizational focus from the backdrop of an indeterminate situation, and, as constitutive of dispositional modes of response, yields directed, teleological or goal oriented activity. The system of meanings both sets the context for activity and limits the direction any activity

8. DEWEY. The Quest for Certainty, p.163.

Cognitio, São Paulo, nº 3, nov. 2002, p. 83-96.

<sup>2.</sup> DEWEY, John. The Quest for Certainty. *The Later Works*. Ed. Jo Ann Boydston (Carbondale and Edwardsville: Southern Illinois University press, 1981-1989), Vol. 4,1984, p. 163.

<sup>3.</sup> Ibid., p.165.

<sup>4.</sup> DEWEY, John. Does Reality Possess Practical Character? *The Middle* Works. Ed. Jo Ann Boydston (Carbondate and Edwardsville: Southern Illinois University Press, 1976-1983), Vol.4, 1977, pp.137-138.

PEIRCE, C. S. *Collected papers of Charles Sanders Peirce*. Ed.by C. Hartshorne and P. Weiss (v. 1-6); Arthur Burks (v. 7-8). Cambridge, MA: Harvard University Press, 1931-1958. 8 v. 5.181 (hereafter cited using only two part conventional notation) The difference, however, is that the latter are beyond criticism.

<sup>6.</sup> MEAD. Philosophy of the Act. Chicago: University of Chicago Press, 1938. p.25.

<sup>7.</sup> LEWIS, C. I. *Mind and the World Order*. New York: Dover Publications, 1929. Appendix A, especially pp.395-397.

takes. Thus, James remarks of noetic activity in general that conceptions are "teleological weapons of the mind,"<sup>9</sup> while Peirce claims that a concept is the mark of a habit of response or general purpose.<sup>10</sup>

The objects of everyday experience, like the objects of second level reflection, are the results of dispositionally generated meaning organizations used to turn a potentially problematic or indeterminate situation into a resolved or meaningfully experienced one. At the level of ordinary perceptual experience, as well as at the level of science, "the object" is an abstraction or meaningful focus marked off within the larger context of the richness of concrete experience. At neither level can "the object" be hypostatized as absolute independently of the meaning structures through which it emerges in experience. Further, just as the second level object gives added significance to the level of everyday experience, so the object of everyday experience gives added significance to the more concrete immediacies of experience.

Such a parallel between the levels of science and common sense thus clarifies the relation between perceived object and appearance within the context of primary or everyday experience. In terms of the above discussions it can be seen that habit or dispositional modes of response organize experience in terms of enduring objectivities, while enduring objectivities give significance to the immediacies of more concrete experience. Thus, our dispositional modes of response fund with enriched meaning the "felt" immediacies or the pervading qualitative appearances of everyday experience. These latter emerge for conscious awareness within the context of a meaningful world of perceived objects. True to the model of the relation between the more concrete and the more abstract, qualitative immediacy conditions all the constituents of a given objective experience, but in turn the constituents of a given objective experience enrich the felt qualitative immediacy with the meaningfulness of the transactional context within which it emerges.

In brief, felt qualitative appearances or "sensations" or data are understood in functional terms. They emerge within the context of a problem to be solved, and are meaningful in terms of the meaningful world of objectivities within which they emerge, be it the "world" of science or the "world" of everyday experience. They are but one class of meanings, and are primary only as tests and confirmation of perceptual claims, not as historic originals. In this sense, felt quality is the most fundamental level for verification in experience in that it is that level most devoid of interpretive elements and, and indicating the way a thing appears, as opposed to the way a thing is, is itself devoid of the future reference of perceptual claims.

This level says the least, is most devoid of interpretive elements, precisely in the sense that reference to future experience contained in assertions of objectivity is withheld. In a certain sense, however, interpretation is very much in evidence, since to focus on this level is to focus on that which emerges via abstractive attention or a change of focus because of a problem which does or may present itself in the

JAMES, William. The Principles of Psychology. *The Works of William James*. Ed. Frederick Burkhardt Cambridge, Mass.: Harvard University press, 1981. II, II, p.961.
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<sup>10.</sup> PEIRCE, 7.498.

coordination of activity. Such a qualitative immediacy is not a building block but a verification level. It belongs to the class of irreducible meanings which are employed in verifying and correcting other meanings. Here, then, can be seen the way in which the view of experience as experimental contains within itself the need for a focus upon immediate quality, though this level itself arises for conscious awareness from within experience of the perceived world, and its very quality is funded with precisely that meaningful back-drop which the change of focus is attempting to withhold.

A discussion of verification, however, leads to a fourth and final characteristic of scientific method. It can be seen that the adequacy of meaning structures in grasping "what is there," or in allowing "what is there" to reveal itself in a significant way, must be tested by consequences in experience. Only if the experiences anticipated by the possibilities contained within the meaning structures are progressively fulfilled—though of course never completely and finally fulfilled—can truth be claimed for the assertions made. Such experimentalism is again reflected in prereflective modes of experience, for, as Peirce so well notes, "There is no span of time so short as not to contain . . . something for the confirmation of which we are waiting."<sup>11</sup> As he well summarizes the role of experimental method operative at all levels, scientific method, as representing a self-corrective rather than a building block model of knowledge, is the only "correct method of fixing belief."<sup>12</sup>

At this point one may object that after all, scientific knowledge is theoretical knowledge and thus can surely not provide the model for understanding everyday perceptual experience. Is not the pragmatist, in dealing with knowledge in this way, once again, though in a different manner, confusing the world of science with the world of ordinary perceptual experience? The answer here is a decisive "no." The use of the model is in no way an attempt to assert that perceptual awareness is really a highly intellectual affair. Rather, the opposite is more the case. Scientific objects are highly sophisticated and intellectualized tools for dealing with experience at a "second level," but they are not the product of any isolated intellect. Rather, the total biological organism in its behavioral response to the world is involved in the very ordering of something isolated from practice. Indeed, the pursuit of scientific knowledge is an endeavor throughout which are "writ large" the essential characters of any knowing, and it partakes of the character of even the most rudimentary ways in which organism-environment interaction involves habits of anticipations of a "next experience to come."

Pragmatism, in focusing on scientific methodology, is thus providing a description of the lived through activity of scientists which yields the emergence of their objects. In so doing, it is focusing on the explicit, "enlarged" version of the conditions by which any object of awareness can emerge within experience, from the most rudimentary contents of awareness within primary perceptual experience to the most sophisticated objects of scientific knowledge. In providing a description of the lived experience of doing science, pragmatism is uncovering the essential

Cognitio, São Paulo, nº 3, nov. 2002, p. 83-96.

<sup>11.</sup> PEIRCE, 7.675.

<sup>12.</sup> PEIRCE, 5.384.

aspects of the emergence of any objects of awareness. Thus, it is at the same time revealing the essential dimensions of the everyday level of experience as foundational for science. In brief, an examination of scientific method provides the features for understanding the very possibility of its existence as emerging from rudimentary experience. If this interplay is not understood, then there results the paradoxical criticisms which are hurled repeatedly against pragmatism, on the one hand that it is too "intellectualistic" because all experience is experimental, and on the other hand that he is too "subjectivist" because of its emphasis on the rudimentary, "felt" aspect of experience.

It has been seen that a proper understanding of the lessons of scientific method reveals that the nature into which humans are placed contains the qualitative fullness revealed in lived experience, and their grasp of nature within their world is permeated with the meaning structures by which they and their world are intentionally bound, both at the level of common sense experience and scientific reflection. Only through such meanings does that which is brutely there, and within which humans have arisen, reveal itself to them. And, it is only within this context that the biological approach to the emergence of meanings as a function of organism-environment adaptation can be understood. The being of the human is within nature. Neither human activity in general nor human knowledge can be separated from the fact that humans are natural organisms dependent upon a natural universe. However, the externally real does not, at any level of human activity, cause a reaction as does a stimulus. Rather, it has a significance, and is acted upon even as it acts upon us. The structures which come to awareness in experience are an interactional unity of such activities. The human organism both creates and responds to its environment. An environment is what it is in relation to the purposive activities of a biological organism, while the purposes of the organism have developed in the course of its need to deal successfully with the environment.

There is a two-fold philosophical sense of purposive biological activity running throughout pragmatism, one ontological, the other epistemic, both of which undercut the level of the biological in terms of the contents of scientific analysis. The dependence of the organism on the environment from which it and its habits have emerged is causal or ontological, but this has nothing whatsoever to do with a causal or reductionist or "naturalized" theory of perception, with causality as expressed in scientific categories, or with a related reductionistic ontology. Rather, it concerns the fact that there is an independent "hardness" or "bruteness" to that which is 'there" that will either frustrate or allow to progress the purposive activities of the organism. In this sense one may speak of the adequacy of meanings in terms of the objective categories of the ongoing conduct of the biological organism immersed in a natural world.

The dependence of the perceived environment on the organism is, however, also noetic or epistemic. Such noetic/epistemic dependence involves neither the above excluded features nor objective categories, but rather is an intentional mind-object relationship that can be epistemically or phenomenologically studied from within. In this second sense one speaks of the adequacy of meanings in terms of the appearance of what is meant.<sup>13</sup>

<sup>13.</sup> MEAD, Philosophy of the Act, pp.115-116.

The significance of habits in this latter dimension is that such dispositions, habits, or tendencies are immediately experienced within the passing present and pervade the very tone and structure of immediately grasped content. Such experienced potentialities provide that fixity and concreteness to objective meanings which outrun any indefinite number of experiences to which they give rise precisely because felt dispositions and tendencies are felt continuities which outrun any indefinite series to which they give rise. As Peirce observes concerning a certain "unboundedness" inherent in dispositional modes of response as a readiness to respond to more possibilities of experience than can ever be specified: because they are, as felt continuities, "immediately present but still embracing innumerable parts . . . a vague possibility of more than is present is directly felt."<sup>14</sup> Such a feeling is rooted directly in time as process; in the process of lived time is to be found the basis for the primitive epistemological "feel" of continuity, of the functioning of meaning as dispositional. As Peirce stresses of the anticipatory experience which allows for a perceived world of objects, it is "something which accumulates in wholes of time and dissipates the more minutely the course of time is scrutinized."<sup>15</sup> Such a durational flow is essential for the pragmatic understanding of experience as experimental, for it involves an anticipation of a next experience to come, something for which we are waiting, an expectation set in motion by the temporal stretch of human activity. And, as Dewey stresses, even the most rudimentary conscious experience. "contains within itself the element of suggestion or expectation."<sup>16</sup> Dispositionally generated meanings grasp the independently real in a direct but non-spectator knowing of reality, their adequacy affirmed or denied by the oncoming experiences which they anticipate.

It can be seen, then, that the irreducibly meaningful behavior of the organism in interaction with its environment is the very foundation of the unity of knower and known. Human behavior is meaningful behavior, and it is in behavior that meaning is rooted. In this way there emerge from organism-environment interaction, irreducible meanings within the structure of experience. The pragmatic focus on scientific method leads to a biological approach to the human which is not in opposition to a view of human awareness in terms of a field of irreducible meanings but rather, when properly understood, the biological is the purposive activity out of which consciousness of meanings emerge. From the context of purposive organic activity and behavioral environment there emerge irreducible meanings which allow objects to come to conscious awareness. Such meanings are irreducible to physical causal conditions or to psychological acts and processes; yet they emerge from the biological, when the biological is properly understood, for the content of human perception is inseparable from the structure of human behavior within its natural setting. The interactive unity at the heart of lived experience is at once practical, epistemic, and ontologically embedded.

<sup>14.</sup> PEIRCE, 6.138.

<sup>15.</sup> Ibid.

<sup>16.</sup> DEWEY. The Existence of the World as a Logical Problem. The Middle Works. Vol. 8, 1979, p. 9.

It has been claimed that the dynamics of everyday experience reflect throughout the dynamics of scientific method. Since "the object" of science is an abstraction from a richer or more concrete transactional experience and hence cannot be hypostatized as absolute, the perceptual object is likewise an abstraction from a richer, more concrete experience and hence cannot be hypostatized as absolute. Thus, Mead states of the universe at the "boundary" of experience, "At the future edge of experience things pass, their characters change and they go to pieces," while Lewis holds that the "absolutely given" is a "Bergsonian duration." As Dewey observes, "Structure is constancy of means, of things used for consequences, not of things taken by themselves absolutely." and is discriminated out of a more uninformed rudimentary experience. Structure cannot be isolated from the changes whose stable ordering it is.<sup>17</sup> There is no contradiction between the pragmatic focus on process and on objects, for the former is transformed into the latter via the experimental nature of experience.

The pragmatic characterization of the concrete matrix of activity which makes possible the dynamics by which the everyday perceived world emerges through the experimental activity of organism-environment interaction is a philosophic claim which helps fund with meaning the philosophical understanding of the dynamics of experience as experimental. Thus, Dewey's characterization of the concrete matrix of undifferentiated activity and James' world of pure experience, as well as his radical empiricism, are interpretive descriptions which direct the manner in which one actively gazes at everyday experience, which both emerge from and bring enriched meaningful understanding to everyday experience, and which are in turn verified by the structures of everyday experience. These features of the relation between the reflections of philosophy and its meaningful grasp of everyday experience are precisely the features previously revealed through the examination of scientific method. This is to be expected, for if scientific method is indicative of the dynamics of all levels of cognitive activity, then it is indicative of the dynamics of philosophic activity, for philosophy is a cognitive enterprise. Thus James can observe the similarity between science and philosophy as second level reflective endeavors, while yet allowing for a diversity of content.

If, as the pragmatic naturalist holds, experience is that rich ongoing transactional unity between humans and their environment, and only within the context of meanings which reflect such an interactional unity does that which is given emerge for conscious awareness, then the nature of experience reflects both the responses they bring and the pervasive textures of that independent reality which enters into experience. There is for pragmatic naturalism a "two directional openness" within experience. What appears opens in one direction toward the structures of the independently real or the surrounding natural universe and in the other direction toward the structures of the human modes of grasping that independently real, for what is experienced is in fact a unity formed by each in interaction with the other, and thus mirrors neither exactly, though it reflects characteristics of each. As Lewis summarizes the significance

<sup>17.</sup> DEWEY. Experience and Nature. The Later Works. Vol.1, 1981, pp. 64-65.

of this interactional unity: "It may be that between a sufficiently critical idealism and a sufficiently critical realism there are no issues save false issues which arise from the insidious fallacies of a copy theory of knowledge."<sup>18</sup>

Because the hereness and nowness of the ontological pole is independent of, yet enters directly into interaction with, our conceptualizations and the possibilities they allow, coherence or consistency is not a sufficient criterion for the truth of empirical assertions. Rather, there must be a pragmatic interplay between our concepts and actual experience. There is an ontological dimension to what appears within experience which limits our interpretations in terms of workability. But true knowledge, even ideally true knowledge, could not be correspondence, for the nature of our intentional link with reality through the creativity of meaning generation makes the relation of correspondence literally senseless. Reality answers our questions, and determines the workability of our meanings, but what answers it gives are partially dependent on what questions we ask, and what meaning structures work are partially dependent upon the structures we bring. The objects of our experience do not copy the independently real but rather emerge through our modes of grasping the independently real. The true belief is one which works not because it adequately copies, but because it adequately "cuts into" the concrete richness of the possibilities of ordering inherent in the independently real.

It is precisely a failure to recognize the radically interactional nature of this "reflecting," and to substitute for it a mirroring either of the ontologically real alone or of our selective activity alone, which leads to the contemporary dichotomies of realism - anti-realism, foundationalism - anti-foundationalism, objectivism – relativism, play or pure presence, conversation or the mirror of nature. Further, it is a failure to recognize that this "reflecting" which constitutes the structure of experience not only is not a mirroring of an independent pole, but also is not a reflection of itself which leads to the failure to recognize that the categories of metaphysics must undercut not only the distinctions both of science and also of common sense to get at the ground of their possibility, but must also undercut the interactional unity of primordial experience to get at the character of the independent pole which such unity in part reflects.

Thus, the focus on scientific method and the understanding of the two directional openness in experience to which it leads reveals that a level of speculative metaphysics can be reached within the structure of pragmatism. There is an independent ontological dimension of what appears which reveals itself in experience and which forms a limit on the possible meanings through which it can be revealed, or, in other terms, on the meanings which will work. The pervasive textures of experience which are exemplified in every experience are at the same time indications of the pervasive textures of that independent universe which, in every experience, gives itself for our responses and which provides the touchstone for the adequacy of our meanings. All knowing involves a unity between human noetic activity and the independently real, both poles of which enter into the character of the experienced world of objects, from the most concrete level of primordial experience to the most abstract reflections of science.

<sup>18.</sup> LEWIS. Mind and the World Order, p.194.

Cognitio, São Paulo, nº 3, nov. 2002, p. 83-96.

Thus, description of the general structures, dynamics, or features of experience, as integral to pragmatic naturalism, provides the basis within pragmatic naturalism not only for the philosophic exploration of the structure of the knowing activity and its objects in all of its aspects and at all of its levels, but also for the speculative extrapolation from experience of the pervasive textures, tones, or characteristics of the independently real which enters into all experience, but whose reality is "there" independent of such experience. And, it should be stressed here that there is a vast difference between the illicit reification by past philosophies of common sense or scientific meanings, and the speculative extrapolation from within experience of the pervasive tones and textures of the ontologically real universe which enters into all experience.

"Is metaphysics possible?" is a much debated question these days. Announcements of the death of metaphysics pour in from commanding figures such as Rorty and Derrida, et al, as a response to a rejection of a tradition of metaphysics rooted in a history of knower as spectator and knowledge as certitude, features which pragmatic philosophy long ago discarded. In assessing the positive value of metaphysics today, the claim is frequently made that metaphysics provides meaningfulness rather than truth and that it is interpretive rather than cognitive. But, truth involves verification, and it has been seen that for pragmatism the creative organization of experience in meaningful ways sets the framework for anticipations of possible experience and verification in experience. Until our world is infused with meanings which contain the conditions for the verification of their application in experience, the concept of truth makes no real sense. Thus the claims of common sense and metaphysics alike provide meaningfulness, a way of orienting oneself to the world, before the issue of truth can emerge. If one does not confine truth to conformity or correspondence to non-perspectival, unchanging, totally structured reality which we merely "find", then meaningful, creative world orientation and truth as workability go hand in hand. For pragmatism metaphysics is a cognitive enterprise, but cognition at all levels involves noetic creativity. It includes metaphor and imagination, but so do the most rudimentary abductions of perceptual awareness. Cognitive experience is by its very nature interpretive. It is indeed concerned to discern meaning, but not meaning rather than fact, for facts themselves emerge within the contours set by the meaning bestowing activity of creative interpretations, and hence are partially the results of such activity.

Indeed, the pragmatic understanding of the metaphysical enterprise reflects the ingredients and dynamics, "write large", of the pragmatic understanding of experience as experimental and transactional. There is an exaggeration of the metaphorical, imaginative, creative features of the meanings which arise out of past experience and which legislate for the analysis of future experience, but the compulsive ontological element always intrudes and renders some creations, some stories if you wish, more workable than others. Thus, there is concurrently an exaggerated attentiveness to what appears in experience, to its pervasive features or textures, to the sense of ourselves as active beings, an attentiveness which both founds the creation of the metaphysical claims and serves as the basis for their ongoing verification or needed revision.

Metaphysics of nature as system, then, is, for the pragmatist, a systematic speculative endeavor rooted in and verified by lived experience. It offers an "explanation" of the feature of that independently real universe which presents itself in the immediacy of organism-environment interaction, which is "open to" certain meanings, and which is known only through such meanings. Pragmatists are led ultimately to an explanatory hypothesis which accounts for the textures of that which is independently there and which enters into all experience. They are led to a speculative analysis, via extrapolation from lived experience, of what that independent reality must be like in its character as independent to give rise to the primordial level of experience and to "answer to" the meanings by which it becomes known to us.

Such an emerging characterization of nature in its deepest sense, as inclusive of all that is and all the ways of being, is a speculative philosophic reflection which must be grounded in everyday experience and be constantly fed by such experience. It is tentative, not certain. It is reflective content rooted in lived experience, not direct grasp of "being in itself." And, though rooted in the lived level, it is never completely adequate to the lived level. It is open to change and development, just as the fruits of all cognitive activity are subject to change and development.

What, then, are the basic textures of the independently real which emerge from such philosophic extrapolation of the textures of everyday experience? Or, in other terms, what are the speculative categories of nature which emerge from philosophic reflection on the independently real concrete basis for all experience, the textures of which are embedded deep within the structure of everyday experience?

The very formation of a reflective system of meanings reveals process as fundamental, for as has been seen, the very structure of meaning grounds in lived experience a primordial grasp of time as process. What occurs with the present awareness is not the apprehension of a discrete datum in a moment of time, but rather the time-extended, dispositionally based, experiential "feel" within the passing present of a readiness to respond to more than can ever be specified. Further, it has been seen that for the pragmatists, the structures of objectivities grasped by the knowing mind do not reach a reality more ultimate than do the processive interactions of primordial experience, but rather the lived through primordial grasp of felt temporality opening onto a processive universe is the very foundation for the emergence within experience of meaningful structure. James indicates this in a way which both clears the path for a metaphysics of process and reflects the interactional unity, at the primordial felt level, of knower and known, self and world, consciousness and object, observing that:

In the pulse of inner life immediately present now in each of us is a little past, a little future, a little awareness of our own body, of each other's person's, of these sublimities we are trying to talk about of the earth's geography, and the direction of history .... Feeling, however dimly and subconsciously, all these things, your pulse of inner life is continuous with them, belongs to them and they to it. You can't identify it with either one of them rather than with the others.<sup>19</sup>

In the immediate flow of experience, in the immediate 'feel' of temporality, knower and known cannot be distinguished because the flow belongs to both. The flow of primordial experience reflects the temporality of the knowing subject and the temporality of a processive universe.

<sup>19.</sup> JAMES, William. A Pluralistic Universe, The Works of William James, p.129.

Such a processive universe which reveals itself in the pervasive textures of experiencing is the home of the whole of the sensory, with its richness and spontaneity, the home of the brute otherness of the independently real with which we interact and to which we respond; the home of the continuities and regularities which pervade our commerce with it and allow us to anticipate the type of presence to be contained within the approaching moment. Thus, all of the pragmatists, through their respective terminologies, converge toward a process metaphysics of nature which can be characterized in terms of categories of qualitative richness, diversity, spontaneity, possibility; interaction, over-againstness, shock, presentness; dispositional tendencies, potentialities, lawful modes of behavior.

Such an emerging metaphysics envisions a universe in which we are at home and with which our activities are continuous; a universe in which our lived qualitative experience can grasp real emergent qualitative features of reality and in which our creative meanings, embodying dispositionally generated noetic potentialities, can grasp the real dynamic tendencies of reality to produce operations of a certain type with a certain regularity. A universe, in short, which is both grasped by, and reflected within, the structure of meaning.

The pragmatic vision developed above, which emerges directly through its focus on scientific method as lived experimental activity, reveals both the irreducibility of meaningful experience to the causal categories of scientific explanation and the access to the real through the richness of the everyday prescientific experience of the human biological organism immersed in a natural environment. In so doing, it both negates all forms of scientific ofr philosophical reductionisms and eludes the false alternatives or misplaced dichotomies which still haunt philosophy today. Indeed, the interactive unity – at once practical, epistemic, and ontologically embedded – pragmatism offers moved it beyond the alternatives offered by the ongoing, popular modernist-postmodernist debate before that debate's very entry into the philosophic scene.

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