Truth and Openness: An Epistemology for Interpretive Systemology

Ramsés Fuenmayor¹

Both an ontoepistemology for reductionist modern science (counter-ontoepistemology) and an ontology for interpretive systemology have been outlined in the two preceding papers in this special issue of *Systems Practice*. In the present article, the notion of "truth" is interpreted in terms of both the ontoepistemology of "reductionism" and the ontology of interpretive systemology. Both interpretations are discussed. Such a discussion represents the objective of this paper, that is, to outline the epistemological "face" of the ontoepistemology of interpretive systemology. In order to design that "epistemological face," the relation between ontology and epistemology must be clarified. Such a relation is seen from the standpoint already provided by the ontology. After the discussion on the notion of truth, the general shape of a systemic-interpretive inquiring process is outlined.

KEY WORDS: interpretive systemology; systems philosophy; soft systems thinking; critical systems thinking.

1. INTRODUCTION: THE RELATION BETWEEN ONTOLOGY AND EPISTEMOLOGY UNDER A PHENOMENOLOGICAL PURVIEW

Merleau-Ponty distinguishes four different moods which drive *intentionality*: the perceptual, the cognitive, the affective, and the practical.² Although all of them occur in varying degrees in any situation, one or two of them might be clearly dominant. They might be so dominant that the others are relegated to a blurred background (Mallin, 1979, p. 15). In the cognitive mood, two subtypes can be distinguished: a mood in which knowledge is not purposefully searched for and one in which it is purposefully searched for under a pretension of validity. The first one is called "spontaneous cognitive" mood, and the second "cognoscitive." In situations concerned with scientific and philosophical activities, a cognoscitive mood is dominant.

The Systemic-Phenomenological Ontology of Interpretive Systemology (Fuenmayor, 1985, 1991a) is concerned with how what-ever-is-the-case is holistically manifested. Therefore, it is thus concerned with how what-ever-is-the-case comes to presence. As such, the ontological purview is concerned with gaining

² For a discussion on intentionality see Fuenmayor (1991a).

¹ Department of Interpretive Systemology, Universidad de Los Andes, Mérida, Venezuela.

knowledge about the general structure of presencing, i.e., the timefull structure of any "situation." On the other hand, the epistemological purview is concerned with gaining knowledge about the possibility of gaining true knowledge with regard to specific phenomena. Hence, whereas the ontological purview is interested in gaining knowledge about any possible situation, the epistemological purview is interested in gaining knowledge about situations which are driven by a cognoscitive mood in their intentionality. This viewpoint from which the relationship between ontology and epistemology is seen concedes a hierarchical priority of ontology over epistemology. While ontology deals with any possible situation independent of which intentional mood is dominant, epistemology deals only with situations whose dominant mood is the cognoscitive. From this viewpoint epistemology is based on ontology.

If another point of view is taken to see the relation between ontology and epistemology, it is discovered that ontology is based on epistemology. Witness the argument that supports this second viewpoint:

The ontological attempt to describe the timefull structure of any situation is itself embedded in a situation where the cognoscitive mood is dominant. In other words, when we are trying to understand and argue about any possible situation we are living a particular situation. Such a particular situation —a very peculiar one indeed— is intentionally dominated by a cognoscitive mood. The cognoscitive mood is thus at the base of any ontological thinking. In this way, epistemology seems to gain hierarchy over ontology. However, there is something particular about this kind of ontological thinking which introduces noise in the last assertion. Under a phenomenological attitude, although a cognoscitive mood is dominant in ontological thinking, such cognoscitively driven thinking attempts to mirror itself beyond itself. Indeed, it is a thinking that attempts to transcend the frontiers of cognoscitively driven situations to any possible situation —not necessarily cognoscitively driven. This strife to mirror itself beyond itself is precisely the core of ontology within interpretive systemology. It is a strife for understanding the possibility of what-ever-is-the-case, not merely in cognoscitively driven situations, but in "everydayness."

The former arguments show that ontology and epistemology cannot be separated; each one makes sense only in the merging with the other in an ontoepistemology. Once this point has been discussed the question of truth can be considered.

2. THE CONCEPTION OF TRUTH IN THE SYSTEMIC-PHENOMENOLOGICAL APPROACH

Any systematic and methodic attempt to gain knowledge about phenomena (Science or Philosophy) is imbued with a concept of truth. The search for refutable knowledge means the search for a knowledge which may be shown to be truthful (to "the other"). What is meant by "true knowledge" under the ontoepistemology of interpretive systemology? Is that meaning different from that of "true knowledge"

under the ontoepistemology of Reductionist Science?

In the ontology of interpretive systemology (Fuenmayor, 1991a), the question that led to the epistemological face was presented thus:

In the counter-ontoepistemology for a systems approach (Fuenmayor, 1991b), it was shown how the principle of noncontradiction announces an ontoepistemology which has guided Western thought to the path of Reductionist Modern Science and its mathematical project. Indeed, the principle of noncontradiction is the negative version of the principle of identity. *To be the same with itself* ("A is A") is what is announced by the principle of identity. But we have already shown that something is the same with itself if and only if it is the same for me and for "the other." Now it can be seen with more clarity what Parmenides implied by saying, "[The only path offered to thought is] that which affirms that being is and non-being is not. This is the way of persuasion since it accompanies truth. . . ." Only *if* what becomes present is the same with itself can it be the same for me and for the other; this is the way of persuasion. This dual sameness, Parmenides tell us, constitutes the principle of truth. Thus, the principle of identity (or noncontradiction) has been the principle of principles throughout Western thought. But how does sameness, in its essential recursive form, constitute the principle of truth? (p. 465)

Observe that when Parmenides chooses, among the many paths offered to thought, that which "affirms that Being is and Non-Being is not," so that knowledge enters in the way of persuasion, he is reducing Ontology to Epistemology. He is reducing the realm of Being to those beings which are manifested through a cognoscitive intention. He is thus renouncing that "mirroring *beyond* itself" that characterizes a proper phenomenological ontology (of everydayness). Now, when the realm of Being is reduced to beings which are grasped within a cognoscitive mood, truth is understood as the pattern of such reduction. Such a "pattern" is better understood in the light of the following discussion.

The Greek word *aletheia* has been translated as "truth." *Aletheia*, the "truth" to which Parmenides referred, meant "unconcealment." When this idea of "unconcealment" is joined with that of "sameness," so that Parmenides' saying may have a sound meaning from the point of view of Modern science, the following interpretation is found: *Truth is the unconcealment of what in phenomena is the same*—i.e., the same with itself *and* the same for me and for the other. The same with itself can be reached only if it is the same for me and for the other.³ But how can it be the same for me and for the other?

The solution to this problem provided by modern science was its "mathematical project" (Fuenmayor, 1991b). Within the scope of the "project," the problem of "sameness" was tackled as follows: define mathematical objects [learnable and teachable objects; see Fuenmayor (1991b)]. Those objects together with the primary relations that define them are axioms. An axiom is a *command* given to "the other." The axiom commands "the other" to conceive of something whose determination is given through the axiom. Galileo says, "I think in my mind

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³ This point was discussed by Fuenmayor (1991a).

of something movable that is left entirely to itself. . . " (quoted by Heidegger, 1967, p. 267). This "thinking in the mind," or rather "conceive in my mind" (mente concipio), is to become a projection on the mind of the other. Newton's First Law of Motion says, "Every body continues in its state of rest, or uniform motion in a straight line, unless it is compelled to change that state by force impressed upon it." Newton commands "the other" (any "other" that accepts the command) to conceive in his/her mind certain abstract objects (body and force) which are determined by what the law says about them. "A body is an abstract object which continues in its state of. . . . " "Force is that which changes the state of rest or uniform motion of a body." "Body" and "force" —and the theoretical properties that connect them— are that which phenomena is to be "identified" with.⁴ They are the "as such" of identifications which occur after the "as such" has been projected on the mind of "the other." In the example this means that, once "body," "force," "velocity," "acceleration," "falling time," "force of gravity," and their mathematical relations are established, those properties concerned with those mathematical concepts are measured "in things." That is, just the falling time "of the thing" is measured under ideal laboratory conditions. Any other quality or feeling about the "thing" is disregarded. Thus, the "thing" is only an anonymous "witness" of a property (Kant, 1787, p. Bxiii; Fuenmayor, 1991b). Since we have already been taught to see the falling time in the "thing," identification is secured. That is, the identified phenomenon becomes the self with itself and the same for me and for the other, because sameness has been secured in advance.

Now what sort of knowledge can be obtained with this kind of procedure? What sort of phenomena can thus be understood? What conception of truth is at work in this procedure? In the following it is shown that knowledge so obtained constitutes only a tiny reduction of what, in a much wider context, is called "comprehension." It is also shown that the sort of phenomena which can be dealt with by this procedure is also a tiny part of possible phenomena.

For instance, I might want to measure the falling time of certain "bodies." Suppose that they are this pen, a piece of very expensive china, "the body of a living person," who happens to be your dearest friend. They are going to be thrown, in ideal conditions, from an altitude of 20 m, in order to measure their falling time. Obviously, here we are not interested in knowing about my pen, about the precious piece of china, or about your friend; nor are we concerned with their fate after the "falling time" has been completed. In this experiment the only concern is with what has previously defined as the bodily property of my pen, the china, and your friend. Obviously, the bodily property of, for instance, your friend, is just one aspect of his

⁴ In our ontology it was stated that, "I turn my head and see a door. This means that what has been distinguished has been *identified* as a door. It is a *door*. The mere "it" is a *distinction*. I could not talk (indicate through language to others) about my *distinction* if I do not identify it as *such*. So while the "it" is the distinction, the *as such* is its identification. Through identification the accidental and fugacious character of the *distinction* is grabbed into "something" which is both perdurable and speakable" (Fuenmayor, 1991a, pp. 464-465).

whole being.

Could reductionist science study "wholes"? The answer is negative. But why? What is the essential restriction that bars the way of Reductionist Science to the study of wholes? The answer, in terms of our ontology (Fuenmayor, 1991a), is simple: a Distinction (a whole) cannot be the same with itself for it is grounded in the essential recursive form {distinction ↔ scene}. What something is as a whole is grounded in what it is not: its scene (Fuenmayor and López-Garay, 1991). Wholeness is thus transcendence from the distinction to the scene. So what something *is* cannot be the same with itself. Now, as already shown in terms of the principle of identity, something can be the same with itself *if and only if* it is the same for me and for "the other." Since a whole is not the same with itself, it cannot be the same for me and for "the other." This last implication can also be argued in the following way.

The noetic image of the scene was shown to be the being-previous (Fuenmayor, 1991a). The being-previous is nothing but our situational history, i.e., that which each one *has been*. That personal situational history is particular and unique for each particular situation. My being-previous now is different from my being-previous 10 years ago; it is different from the being-previous of one of my colleagues; it is even more different from the being-previous of a person belonging to a different society. Since being-previous is that which in each case gives its holistic meaning to what ever is the case (my pen, your friend, an institution such as the UN, poverty in the world, etc.), such holistic meaning cannot be the same for me and for "the other." When something is not the same for me and for the other, we say, in ordinary language, that it is an "*interpretation*." Thus, the main ontoepistemological conclusion reached so far can be stated as follows.

A systems whole or "holon" is not the same either with itself or for me and for "the other." *Holons are Distinctions; therefore they are "interpretations."* Hence, holons cannot be studied within the scope of reductionist modern science and its mathematical project. Furthermore, the search for true knowledge with regard to holons cannot be guided by that conception of truth put forth before, namely, that *truth is the unconcealment of what in phenomena is the same.* But what, then, is the concept of truth in interpretive systemology? In the following a conception of truth which not only is in agreement with our ontoepistemology but also comprehends any possible notion of truth is discussed.

In the preceding paper (Fuenmayor, 1991a), it was shown that the general notion of truth along most of Western thought is that *truth is the unconcealment of what in phenomena is the same*. In the first paper in this trilogy (Fuenmayor, 1991b), I explained how this general notion has been interpreted in Modern Science as *adaequatio intellectus et rei*. This particular interpretation of the original notion of truth in Modern Science must be researched further in order to bring forth the interpretive systemology's notion of truth.

The treatment of this topic is started by following Heidegger's writing "On the Essence of Truth"; thereafter I shall make use of such impulse to display the topic upon our own conceptual framework.

2.1. The Traditional Concept of Truth in Reductionist Science

The traditional definition of truth is *veritas est adaequatio rei et intellectus* (truth is the correspondence between thing and intellect). Such a definition —which seems to indicate the everyday notion of truth— can be understood in two senses.

- (a) Correspondence of thing to intellect (adaequatio rei ad intellectum): The ordinary meaning corresponding to this sense is that of "genuineness." For example, genuine gold (true gold) is that which is in accordance with a quality of goldness preconceived by us (notice the "us").
- (b) Correspondence of intellect to thing (adaequatio intellectus ad rem): This is the meaning of truth implicit in the epistemological concept of refutability. It is traditionally understood as propositional truth and refers to the accordance of propositions with the things they name and qualify. "A statement is true if what it means and says is in accordance with the matter about which the statement is made. [Here] it is not the matter that is in accord but rather the proposition" (Heidegger, 1949, p. 119).

In both cases the true is what accords.

Heidegger explains that the most recent origin of the concept of truth (Medieval) can be found in the Christian theological belief. As will be seen, such origin matches very well with Descartes' Ontological framework:

With respect to what it is and whether it is, a matter, as created (ens creatum), is only insofar as it corresponds to the idea preconceived in the intellectus divinus, i.e., in the mind of God, and thus measures up to the idea (is correct) and in this sense is "true. . . ." If all beings are "created," the possibility of the truth of human knowledge is grounded in the fact that matter and proposition measure up to the idea in the same way and therefore are fitted to each other on the basis of the unity of the divine plan of creation. . . . But this order [plan], detached from the notion of creation, can also be represented in a general and indefinite way as a world-order. The theologically conceived order of creation is replaced by the capacity of all objects to be planned by means of a worldly reason (Weltvernunft) which supplies the law for itself and thus also claims that its procedure is immediately intelligible (what is considered "logical"). (Heidegger, 1949, pp. 120-121)

That "world order" is, according to Reductionist Science, an external order (external to the observer). We —the observers— are made of matter which fits into that external order. Our minds are emergent properties of matter which can be sharpened in order to find out how things behave within that order. Remember that according to Reductionist Science the world is a collection of objects, each of which is essentially determined in-itself and externally related to each other within a world order. This order may be described by a set of "laws of nature" (Fuenmayor, 1991b).

Under such a conception there is for each phenomenon one and only one universal truth: since a thing is entirely determined in itself, the truth is the "correct" description/explanation of such determination. This means that although there may be many descriptions/explanations, there is only one of them which finds its maximum degree of accordance (correctness) to that determination.

Reductionist Science understands truth as *adaequatio intellectus ad rem* (correspondence of intellect to thing). But what is the nature of this accordance of a proposition to a thing? This question is put forward by Heidegger as follows:

But wherein are the thing and the statement supposed to be in accordance, considering that the relata are manifestly different in their outward appearance? (Heidegger, 1949, p. 122)

For example, when regarding a coin we state, "This coin is round." What can accord between the statement and the coin?

The coin is made of metal. The statement is not material at all. The coin is round. The statement has nothing at all spatial about it. With the coin something can be purchased. The statement about it is never a means of payment. But in spite of all their dissimilarity the above statement, as true, is in accordance with the coin. (Heidegger, 1949, pp. 122-123)

Then what is the nature of this accordance? The role of propositions with regard to our ontoepistemology is examined in search for an answer to this question.

2.2. The Opening and Closing Character of Propositions and the Openness of Truth

A proposition is an indicative identification (Fuenmayor, 1991a) of something, together with the announcement of one or more features (properties, characteristics) of such a thing ("second-level identification"). "The coin is round" is presenting the thing called "coin" and, at the same time, is announcing that its shape is round.

Thus, the role of a proposition with regard to its subject (the thing it is indicating and qualifying) is, first, to present it as a particular possibility (a distinction) within the realm of whatever it is not (scene) and, second, to present a possibility (both generic and specific) within the realm of any possible predicate of the subject. The validity claim involved in those "identifications" carries with it a strife toward sameness (Fuenmayor, 1991b).

Since the proposition is presenting one possibility (i.e., indicating a distinction), it is opening the realm of possibilities of what it is not. It is opening the scene for a distinction. The proposition then discloses the realm of being (a "universe" in Spencer-Brown's terms) by drawing a distinction; hence, its opening character.

Nevertheless, the opening of the scene is immediately closed due to its

"nonindicability" in contrast with the "indicability" of the distinction. *The indicability of the distinction carries with it the nonindicability of the scene*. Hence, the proposition has a closing character over that which is not indicated.

The essential recursiveness manifested in this simultaneous opening and closing is, precisely, the very source and foundation of truth. See why.

The proposition opens and closes a region of possibilities comprised in the scene. When truth is claimed a reopening of the scene is claimed. Truth essentially and necessarily implies untruth. What is to be true *is offered against* a region of possibilities which are not to be true (or less true). This means that the essence (the foundation of its possibility) of truth lies in the opening of the scene from which a possibility—the one which is claimed to be true—is distinguished. The search for truth is, then, the explicit comparison between the possibility which is claimed to be true and what is left aside by such a claim. This is equivalent to standing what may be true in the openness of its possibilities. In other words, truth implies doubt. Doubt is the openness for what may be. Doubt is contingency. The explicit search for truth is then, the explicit "situating" of the indication (what is being announced) in contingency. This is an epistemic "situating" performed by explicitly comparing possibilities and arguing that "that which is claimed to be true" accords (or accords better), while the other possibilities do not accord (or accord less). But with what does "that which is to be true" accord?

We have seen that the proposition is that which accords with "that which is to be true." The proposition is the announcing (indication) of a distinction. Now, such announcing is indicating —if truth is claimed— an accordance between "that which is to be true" and "something." What is this "something"? How is such accordance possible and what is its nature?

We have already commented upon the answer given by most of Western thought: what is to be true accords with the possibility of being *the same* (i.e., the same with itself *and* the same for me and for "the other"). However, under the light of the former reflection, we can see that this is only a partial answer derived from a partial purview. The essential recursive form that underlies the essence of truth is reduced to one of its sides. Witness why.

That which is claimed to be true is an indication of a distinction. A distinction is possible only within the essential recursive phenomenon called Distinction. *Truth is thus the inner accordance of the "Distinction."* That is to say, truth is the essentially recursive accordance between "distinction" and "scene." The scene is the foundation of the possibility of what is being indicated and identified "as such" (what is to be true). Identification is the reduction of the Distinction to its sameness. But both this reduction and the very possibility of sameness are grounded in the total alteration (nonsameness) of the scene. This is nothing but the openness of the scene. But how can the scene be opened?

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⁵ When we say that the statement "The coin is round" is true, we are necessarily implying that it does not present any other shape but a round shape. To be "round" is offered against any other shape as the true one. ⁶ This idea is put forth by Heidegger (1967) by means of a different line of argumentation.

2.3. The Possibility of Searching for Truth and the Unindicability of the Scene

In our ontology (Fuenmayor, 1991a), it was established that the scene is essentially unindicatable and cannot be made explicit. It was argued that any attempt to describe the scene would result in a new distinction, and hence, it would not be a description of the original scene. According to this, it is not possible to make explicit (or explicitly open) the scene without losing the original distinction. Thus, it seems that truth is only a general theoretical possibility which cannot be researched with regard to a particular distinction. If the concept of truth is meaningless with respect to particular phenomena, the possibility of searching for refutable knowledge about particular phenomena would be closed. Such a dramatic conclusion needs a revision of its conceptual bases. It is shown that although it is not possible to reveal the instantaneous scene of a present distinction in an absolute way (which would imply to know the whole), it is possible to revise the scene by means of an interpretive process which enriches it.

Let me explain this by means of an example. A teacher of physics opens the door of a classroom and sees "F = m.a" written on the blackboard. A "distinction" indicated by "F = m.a" has taken place. A 10-year-old boy enters the "same" classroom and sees the "same" formula (the same indication). The boy, who does not know anything about physics, is in front of a quite different "distinction." In everyday language we say that "F = m.a" has different "meanings" for both persons or that they are making different interpretations of the "same" thing. Notice that both distinctions are instantaneous. The teacher does not have to carry out any thoughtful process in order to recognize Newton's formula, nor does the child have to examine carefully "F = m.a" in order to recognize some letters written on the blackboard. The "scene" (context of meaning) from which the teacher is distinguishing "F = m.a" is different from that of the child. The teacher has learned and assimilated Classical Physics. Such learning has enriched his being-previous so that his intentionality made instantaneous the identification of "F = m.a" as Newton's Formula. This instantaneousness is such that the teacher is unconscious, at the moment of the Distinction, that the "enrichment" of his being-previous, concerning Mechanical Physics is *determining* one single interpretation of "F = m.a." That is to say, normally the teacher is not aware that his interpretation is among others. Hence, he is not aware of that "relevant region" (the enriched region) of his being-previous that is playing a definite role in his particular interpretation. On the other hand, the boy can make no reference at all to that relevant region (Classical Physics), hence, his interpretation is and has to be radically different from that of the teacher. Although both "scenes" (contexts of meaning) are different, neither the teacher nor the boy is conscious of the particularity and relativity of each of their interpretations. In both cases the corresponding scenes remain closed; thereafter we cannot talk of truth in either case.

⁷ In other words, it is not possible to see simultaneously what one is looking at and the look itself.

Nevertheless, the teacher could *understand* ("under-stand": to take another "stand" or to take another point of view) the boy's interpretation. That is to say, the teacher can "simulate" the child's contextual system and imagine that under such a stand (contextual system), "F = m.a" is a set of symbols or "some" formula. This simulation is performed by "depriving" his contextual system of Classical Physics (imagining that he does not know anything about that subject). Notice that this deprivation is carried forward by contrasting both interpretations with their contextual systems. The contextual system of the teacher is now more comprehensive than the boy's with regard to "F = m.a." It can comprehend the child's contextual system and "simulate" his interpretation. "Simulation" of other interpretations through "understanding" and "comprehension" uncovers some other possibilities for what is present. The presence (pre-essence) tends to be situated in contingency. Hence, the essence (the foundation of its possibility) tends to be uncovered. This uncovering not only enables the interpretation of that which is present within other contextual systems, but also makes feasible the recognition of some of the "relevant regions" of the scene in which the original distinction took place. The teacher can now be more aware of the scene of his instantaneous interpretation.

Interpretive understanding and comprehension is an attempt to open the scene of the distinction. Due to the essential recursiveness of the Distinction (manifested with respect to truth in an essential recursive openness and closure), the total opening of the scene is not possible. It would mean a total closing of the distinction and, hence, the total closing of the scene. However, by using an interpretive method in which contextual systems are contrasted, it is possible to increase awareness of some relevant regions of the scene. This increasing awareness means an increasing opening of the scene and hence a search for truth. This is nothing but a search for holistic comprehension.

Now this *interpretive method* is a controlled process of making Distinctions "around" the original distinction. Does this not mean that we are losing the original Distinction? Does this not mean that we are losing sight of the phenomenon of Holistic Transcendence? In order to treat these questions it is necessary to revise the aforementioned instantaneous character of the Distinction.

2.4. The De-becoming of the Scene: The Ontological Temporal Foundation of Interpretation Within the Systemic-Phenomenological Approach

Distinguishing a distinction is certainly instantaneous. But this instantaneousness is essentially rooted in the noninstantaneous character of the "Distinction" (understood as a form of essential recursiveness). Let it be explained.

"A distinction is instantaneous" means that the act of distinguishing the distinction can take place only in a "now and here" situation. However, what-ever

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⁸ This instantaneous-noninstantaneous character of the situation was discussed in the noetic account of the *situation* (Fuenmayor, 1991a).

takes place (whatever is distinguished) in a "now and here" situation is founded on its scene.

The noetic image of the scene is the being-previous. The being-previous is that which has been left by all my experiences; it is the "passive self" (or the "has been" self —present perfect); it is the continuous and always never finished "becoming." The scene is not an entity; it is the *becoming ground* which makes possible a "distinction." On the other hand, this is a becoming which can only be insofar as it is thrown/projected/"impleted" onto that which is taking place, onto the distinction. *Instantaneousness* is grounded on *becoming*, which is *noninstantaneousness*. *Instantaneousness* can only be thought of as "against" *becoming*. *Instantaneousness* and *becoming* are then the "temporal" recursive sides of the Distinction. A Distinction is then, instantaneous and noninstantaneous.

The temporal recursiveness of the Distinction is rooted in the very essence of intentionality/readiness. Becoming is readiness/intentionality for what is coming (or what is to come). Intentionality/readiness is grounded on becoming and is projected onto the coming. "Past" and "future" (becoming and coming) merge into an essential recursiveness within the "now and here" situation.

Due to its temporal becoming nature, the scene cannot be unfolded by means of a single instantaneous distinguishing. What is being indicated is instantaneously distinguished. But it is so only because the foundation of its possibility is a temporal becoming. The opening of such foundation —i.e., of the scene— has to be a becoming process. Or, rather, a *de-becoming* process in that it is a "re-vision," of becoming.

Now this *de-becoming* process of unfolding the scene is inexhaustible, neverending, unlimited. Let us see why.

A distinction —say the formula "F = m.a"— depends on all the becoming (being-previous) of the observer. There are, of course, some "regions" of such becoming more relevant to that distinction than others. However, the unity of the self connects them all. The becoming of the observer is rich enough to explaining the inexhaustibility of the de-becoming process. But there is more: my becoming is not an isolated becoming. As already shown (Fuenmayor, 1991a), the notion of *self* is essentially recursively founded on "the other." The becoming of the culture I live in is impressed in my particular becoming. On the other hand, the de-becoming process is a process of Distinguishing. Such a process further enriches the becoming (the being-previous) of the inquirer. Hence, the scene, which is pretended to be unfolded, is continuously changing.

The former arguments support the inexhaustibility of the interpretive inquiring process which pretends to open the scene. This inexhaustibility, together with what we have learned concerning the possibility of unfolding the scene, faces us with the question of the possibility of truth about a particular phenomenon.

⁹ "Impleted" is a verb derived from the noun "impletion."

¹⁰ "Temporal" is used here as an adjective referring to the essence of time. For a discussion on this subject see Heidegger (1962, pp. 38-40).

2.5. The Possibility of Truth: A Summary

- 1. The possibility of truth is founded on the openness of the scene.
- 2. The opening of the scene is a de-becoming process which cannot be exhausted or completed. The completion of such a process would mean the closure of the scene.
- 3. According to 1 and 2, truth is not a static status that can be reached and then frozen. Truth is an essentially dynamic process which cannot be finished or stopped because it would turn into the opposite of truth.
- 4. The process of searching truth or rather the "truthing" process is a debecoming of the scene carried out by seeking relevant regions of the scene.
- 5. The search for relevant regions of the scene is an interpretive process of understanding and comprehension which implies contrasting contextual systems. This process is schematized in section 3.

The former ideas about the possibility of searching out truth with regard to a particular phenomenon bring with them a striking conclusion: *independent propositional truth is senseless*. This point is further explained below.

2.6. The Meaningless of Independent Propositional Truth

Take an independent proposition: "The coin is round." According to the Reductionist conception such a proposition is either true or not true. One or the other verdict (true *or* false) closes the scene of the distinction being indicated. When in such a case we say "true" or "false," we are, at most, indicating that what is being claimed to be true accords with *one* single and *implicit* contextual system. The singleness and invisibility of the contextual system do not enable an explicit interpretation. Hence, what is claimed to be true becomes a *determination and not a possibility*. The scene remains closed. Then, it is not a matter of truthfulness but of a closing "yes" or "no" disjunction.

The search for truth then has to be orchestrated within a multiple interpretive process which bases a debate among different interpretations according to their diverse contextual systems. This debate is the openness of possibilities performed by means of a continuous comparing and refuting. The development of such a debate is the search for comprehension.

The knowledge of things in their holistic transcendentality is the openness of their scene. This is the search for comprehension within an interpretive purview.

3. A SYSTEMIC-INTERPRETIVE INQUIRING PROCESS

This section is devoted to presenting a systemic-interpretive inquiring process derived from the epistemological discussion developed so far. Although the conceptual bases of such an inquiring process have already been presented, some of the key words used for its schematic description have been taken from the Interpretive Paradigm of Human Sciences. Particularly, the work of Max Weber and

Wilhelm Dilthey, pioneers of the Interpretive Paradigm in Human Sciences, have constituted a very important source of inspiration (see Dilthey, 1976; Weber, 1978).

The main conclusions obtained in Section 2 are recalled. It was established that the search for truth has to be orchestrated within a multiple interpretive process which bases a debate on different interpretations according to their diverse contextual systems. The never-ending aim of such a process, which was shown to be equivalent to searching for knowledge of things in their Holistic Transcendence, is the openness of the scene of the situation under study.

As a consequence, the systems search for knowledge is characterized by the modeling of various contexts of meaning, by explicitly interpreting the phenomenon with regard to such contexts of meaning and by discussing the various interpretations under the light of their respective contexts of meaning. The fundamental concepts of that Systemic-Phenomenological Inquiring Process are formalized below.

- "Thematic Contextual System" (or "Thematic Context of Meaning") is an interpretative contextual model. Its purpose is to serve as one possible contextual system where a phenomenon may have one of its possible interpretations. It does not pretend to copy or make a "photograph" of reality; rather it is used to highlight one point of view of a phenomenon so that the relativity and plurality of interpretations become visible.
- "Thematic Understanding" is the process of explicitly designing various thematic contexts of meaning (contextual systems) and explicitly interpreting the phenomenon under study in the light of each one of those contexts.
- "Thematic Interpretations" are the explicit results of interpreting the phenomenon in each thematic context of meaning.
- "Thematic Comprehension" is the process of orchestrating and performing an explicit debate among the different "Thematic Interpretations" within a conceptual framework which contains the various Thematic Contextual Systems.

The Systemic-Phenomenological inquiring process¹² then can be expressed as the two-phase process depicted in Fig. 1.

The phase of understanding sets the structure of the debate in the phase of comprehension which, in turn, may lead to enriching the structure resulting from understanding, and so on.

¹² This is only a general model of the interpretive systemology's inquiring process. For a more detailed methodological discussion see Fuenmayor (1985, 1988).

¹¹ Thematic Contextual System is a notion inspired in Weber's "ideal types" (1904). There are, however, certain differences between both concepts, which we will discuss in a future paper.

UNDERSTANDING

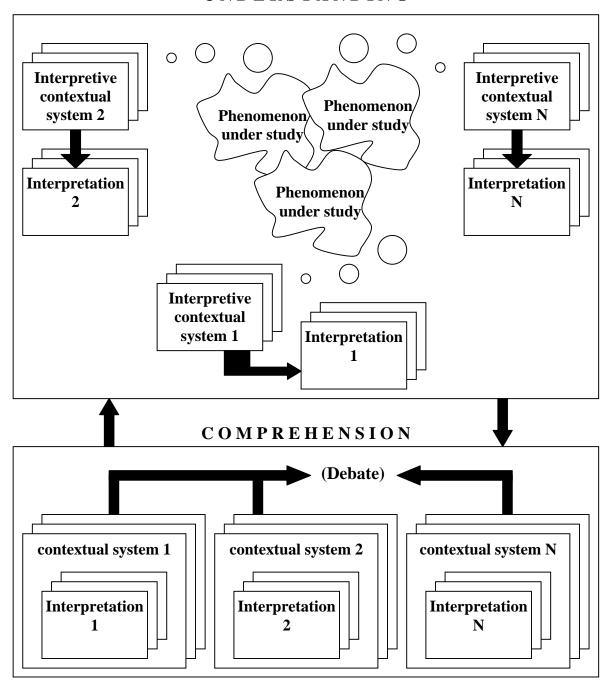


Fig. 1. A systemic-interpretive inquiring process.

The result of thematic comprehension does not have to be an agreement. The result is a state of enriched consciousness about the possibilities of the phenomenon under study and its insertion into a general conceptual framework. It is not, then, an explicit result. What is explicit is the discussion, not the enrichment derived from it.

Let this implicit (nonexplicit) result of comprehension be called "sense." "Sense" is the thematic approximation to the wholeness of the phenomenon under study, resulting from thematic comprehension.

4. CONCLUDING REMARK

This article closes the circle drawn by the trilogy, "The Roots of Reductionism," "The Self-Referential Structure of an Everyday-Living Situation," and "Truth and Openness," presented in this special issue of *Systems Practice*. The trilogy of articles outlines the current state of an ongoing inquiry into the ontoepistemological foundations of interpretive systemology. As the reader can now appreciate, after reading this last article on the epistemological side of that ontoepistemology, the inquiry into the ontoepistemological foundation of interpretive systemology is performed under the methodological guideline provided by the "systemic-interpretive inquiring process" (presented in Section 3 of this paper). Such an inquiring process was, in turn, derived from the ontoepistemology obtained by following that inquiring process. The systemic-interpretive inquiring process and the ontoepistemology on which it is based are linked together in an "essential recursive form" illustrated by Escher's "Drawing Hands" (Fuenmayor, 1991b).

The first article in the trilogy ("The Roots of Reductionism") presented an interpretive contextual system which could ontoepistemologically explain (give sense to) "reductionism" in modern science. The second and third articles ("The Self-Referential Structure of an Everyday-Living Situation" and "Truth and Openness") presented an opposing interpretive contextual system which could give sense to a systems approach viewed as antithetical to reductionism. It is important to insist in the essential recursion established between both interpretive contexts. The frontiers, the lines of demarcation, of each interpretive context are possible only because of the contrast provided by the other. Hence, the ontoepistemology of interpretive systemology is not only the ontoepistemology for a systems approach presented in the second and third articles; rather, it is the transcendental unity provided by the essential recursiveness (dialectics) established between both the counter-ontoepistemology and the ontoepistemology. See Fig. 2.

The main outcome of this third paper in the trilogy has been to manifest, with greater clarity, how the principle of noncontradiction (or of identity) gave rise to a particular way of merging together ontology and epistemology around a notion of truth. Indeed, Parmenides' dictum was to choose, from among the many ways offered to thinking, only that which asserts that "being is and non-being is not." When such a dictum was followed by Western thought, the realm of possible beings was restricted to objects presented only under one mood of intentionality, the "cognoscitive." Moreover, a further restriction was operating on the already restricted realm of beings: knowledge was limited by a restricted notion of truth. The result was that ontology was no longer directed to the understanding of presence and presencing in any everyday-living situation. It was restricted to that

which becomes present under a "cognoscitive" mood of intentionality, restricted even further by a particular notion of truth. Thus, ontology disappeared and became epistemology in Western thought. Modern science grew under the shadow of this great reduction, which gave rise to what today is known as "reductionism." In philosophy, the same reduction took place (and keeps on taking place in some current philosophical trends). It was Kant who, in his "Transcendental Dialectic" (Kant, 1887), took the initial steps leading to the possibility of recovering ontological thinking. The "logic of illusion," as he entitled his dialectic, was to be further developed by Hegel. However, it is only in this century, in the work of Heidegger, that we find a clear will to *ontological* thinking.

Onto-epistemology for interpretive systemology

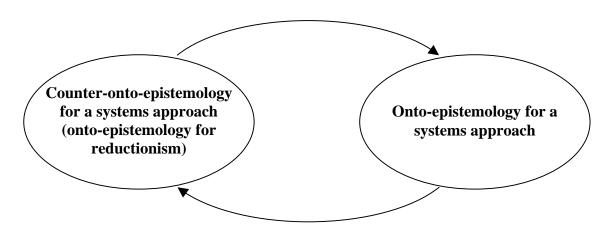


Fig. 2. The essential recursive form of an ontoepistemology for interpretive systemology.

Systems thinking, if it is critically driven (in the sense discussed by Fuenmayor, 1990), is called upon to create a greater awareness of the need to recover ontology from its epistemological trap. It must not only recover ontological thinking, but gain greater interpretive understanding of the power structure that was developed under the aegis of the great reductions in Western thinking. Such a power structure, as we shall see in a future work, is underpinning the domination of instrumental thinking (Fuenmayor and López-Garay, 1991) over any other type of thinking. In turn, such domination of instrumental reason is patronizing other kinds of violence, domination, and exploitation over the majority of mankind.

ACKNOWLEDGMENTS

Thanks are due to Dr. Abdel Fuenmayor and to my colleagues in the Interpretive Systemology Research Group, Jorge Dávila, Hernán López-Garay, and Alejandro Ochoa, for their helpful comments on and criticisms of the manuscript. I also want to express my gratitude to Michele Lee for her careful proofreading.

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