David Oyler Phoenix, Arizona March 17, 2005

## The Primacy of Performance

Rather than being in a reductive or a hierarchical relation to one another, the sciences are complementary to one another. Fundamentally, reduction models the sciences as a series of levels of explanation where the lower level ultimately explains the higher. The higher level, then, is not really higher but a synopsis, simplification or abstraction of the lower level that would disappear if we had the lowest level of explanation delineated and preferred to go through the detail of dis-integrating the higher levels in terms of the lowest. Alternatives to reduction include considering the sciences as a series of levels of integration or organization where the higher level cannot be reduced to the lower because it organizes it in some sense. In this characterization one may notice that reduction corresponds to analysis and the notion of higher organizations of lower levels of entities or parts corresponds to synthesis. However, both of these, as trading on the spatial metaphor of levels, tends to assume that a whole is something that can be disaggregated or built. While this may be true of things like houses it is not true of organisms. There is a complementary notion that the sciences stand in relation to one another as organizer/organized or as of lower to higher viewpoints as in the case of some of mathematics. In the case of the organism the sciences do not stand in the relations analogous to those of organizer and organized. Rather they are complementary to one another in understanding different aspects of a single thing. Philosophy, insofar as it is scientific, would have a complementary role. We will indicate what this could be by focusing on Merleau-Ponty's notion of the primacy of perception using it as an analogy for moving towards a broader explanatory context of the primacy of performance.

In an argument explicitly analogous to Kurt Goldstein's in his classic The Organism regarding the non-existence of isolated reflexes, Merleau-Ponty contends that the notion of qualia is based on an abstract, empirically indefensible theory of perception. A quale, or sensory property such as a particular color as perceived, is abstract in two ways. First it can be considered independently of the thing of which it is a property. Second, and this is the sense that is important for Merleau-Ponty, it is considered independently of the perceptual field within which it is distinguished. The temptation is to consider perception as constituted by individual qualia just as some behaviorists considered performances to be constituted by reflexes or reflex-like operations. Merleau-Ponty weds the Gestalt theory of perception with phenomenological investigation to show that the opposite is the case. It is possible to abstract qualia because there is a perceptual field of which they are a part. Rather than perception being constituted by gualia, gualia are what they are perceptually in relation to the whole field of which they are part. The field itself is given at once as a whole. It is not "constructed" or synthesized. The field consists of a figure and a ground. The figure is the focus of attention and the ground is the context or "background". The figure is always a gestalt or a structure in the most general sense and qualia are aspects of the perceptual structure and the ground.

1

The perceptual structure is a structure of perception versus a perceived structure, such as a house, which is an object. Whereas the object is a whole, perception is open, incomplete or indeterminate. The object is never fully given, though it is intended as a meaningful whole. In contrast, naïve theories of perception assume a fully constituted world. This is the source of issues of trying to link up the inner and the outer, the real as objective with the subjective as perceived or experienced, and so on. Rather the world is not independent of consciousness. It's givenness is analogous to the incompleteness of perception. He considers the world as the totality of possible perspectives. Perception, then, needs to be understood within the context of the conscious, situated person. It is the move into that context which is the phenomenological reduction. It is a move that existentially breaks with the world as already-out-there now. But as is well known, it brings its own issues with it.

Merleau-Ponty models knowing on the lines of perception. The analogy is with perceiving, not with the perceived. Knowing is in the context of the temporal structure of consciousness. The present is the intention of an indeterminate future with both partially contextualized by the past. The temporal modes form a whole which also is open and indeterminate. To get to an absolute truth which is independent of particular knowers is literally to try to get to the end of time; not linear time, but phenomenological time. Truth may be absolute, but it always is relative to consciousness. At the root of phenomenology and intentionality is the paradox that reality is for us as it is in itself. Phenomenology lives with this paradox rather than explaining and resolving it.

What would the resolution be? As phenomenology makes a fundamental move into the context of consciousness to critique naïve realism and naturalism there is an additional move required to understand consciousness within an explanatory context. Phenomenology transformed to incorporate hermeneutics. But this was not a move into explanation but a detour into metaphor, analogy and interpretation. Rather both of these need to be understood as precursor's of existential explanation, where the free, responsible person doing the explaining is to some degree included within the explanation's domain. Whereas phenomenology situated being in itself in the context of being for consciousness, once being for consciousness is understood, it needs to be situated explanatorily in the context of being in itself. Otherwise, it cannot be understood how being can be for a consciousness that has evolved and has neural conditions. Merleau-Ponty's argument for the primacy of perception is an argument for understanding that an understanding of perception as experienced, or a phenomenological understanding, is key to understanding all modes of being in the world. It would be superseded by an analogous argument for the primacy of performance. There is a real sense in which all subsidiary elements or operations converge on performance and all human meaning and social structures proceed from it. As a dynamic whole performance is an efficacious locus for explanation in ethnology and the human sciences. We will lay this out indicating how mind can be understood both as for itself and in itself. As understood in itself it can be understood both as experienced and not experienced. The possibility of the primacy of performance is found in the relation of the performative components to the performance as a whole.

In his arguments against empiricism and naturalism Merleau-Ponty illustrates Husserl's contention that science which ignores the primary data of consciousness and the secondary data of the life world can lose its ground and thereby its relevance. An example is the model of perception as made up of elements or qualia. There simply is no evidence for any isolated qualia. They are an abstraction thinkable only on the basis of perception itself. Rather, as we noted, he finds ample evidence to perception being holistic and embraces the Gestalt theory for which there is ample scientific and phenomenological evidence. In this sense, naturalism, as embracing a particular type of explanation, becomes reductive and experience itself literally dis-integrates never to be even theoretically reconstructed. The issue is compounded by the experimental stance of viewing perception from the "outside in". In other words there is the assumption that the perceived is a complete object as is the perceiver. It is a matter of taking each apart, relating the parts to one another and reconstructing the whole scene. The imaginative, extroverted view is strong here. What we have in the philosophically unsophisticated scientist is the possibility of various forms of naturalism playing out within variations of naïve realism. This may work to some extent in the physical sciences, but it spells disaster, or better, triviality, in ethnology and the human sciences.

But phenomenology has its own contribution to make to the theory of perception. This is Husserl's notion of perception as perspectival, which Merleau-Ponty generalizes to a particular notion of being. But this notion of being does two things. First it leaves the paradox of intentionality unresolved. Secondly, it precludes the kind of viewpoint necessary to fully explain consciousness. One needs to somehow get beyond the horizon bounded by possible experience to understand its possibility. Thus, the primacy of perception has at least two meanings. The first is to phenomenologically attend to perception if you want to understand it. This challenges naïve realism or the natural attitude. The second is that the perceptual stance is analogous to the relation of consciousness to being which precludes getting "out" of consciousness to understand being as fully independent of it. It precludes the famous "God's Eye view". So for Merleau-Ponty, just as any theory of consciousness needs to take the phenomenologically described view of temporality into account, any theory of knowledge needs to account for its temporal, human origins.

This, however, exposes one to idealism, for the meaning of being, in this case, is to be in relation to consciousness. Now, it may be that being is understood via an understanding of the relation of consciousness to being, but that does not mean that to be is to be in relation to consciousness.

We contend that this issue disappears in a fully explanatory account. In general we are considering three theoretically differentiated viewpoints, the naturalistic, the phenomenological and the fully explanatory. The first is explanatory, but not interior. The second is interior and only implicitly explanatory. The third is interior and fully explanatory in intent. They correspond to fundamental orientations. The first is based on an extroverted model of knowing. The second is based on intentionality. The third is based on the intellectual pattern of experience per se of a relatively mature intellectually converted inquirer. Again, the first primarily regards the relations of things to us; the second the relation of us to things; the third the relation of things to one another. The first focuses on sense data and sensibly based observations as the primary form of our relation to being, the second on the data of consciousness as immanent in Husserl's sense and the third on data of sense and consciousness, but also symbolic thought and expression. Why the reliance on symbols or signs?

Considering the thing for us and the thing in itself we see that there are three options regarding the relations of the thing in itself to observation. The first case is where we can observe things in themselves, but we know they exist independently of our observing in particular and our experience in general. We can understand some of them independently of their relations to us or to any consciousness. In the second case, the thing in itself does not exist independently of experience, because it is experience in some sense. This is the immanence of consciousness. The third is that the thing in itself is not observable. In this case we can have data regarding it, but we do not have any "direct" experience of it.

How is it possible to know something we do not directly experience? Given that observations are interpreted in some sense, that is, that they are observations of "something", distinguishing the observable from the unobservable becomes problematic, for how would we know that something was unobservable if we could not "observe" it in some way? We can resolve this issue by relating observation to what we experience immediately to data which can be related to what we do not experience. Thus, I observe the movement of the needle on a seismograph which I interpret as data indicating that there is an earthquake, though I do not observe the earthquake in the sense of experiencing it via any of its effects other than the movement of the needle.

Now the earthquake is not unobservable. In this instance, it simply is not observed. But there are things and events which are unobservable in that we are related to them only though our understanding of data, which, as observed, is a mediated manifestation or effect of the thing or event. Atoms, for example, are too small to be seen with the naked eye, but we do have various pictures of them. An atom is an example of a known unobservable. But we also can postulate reasonably a set of unknown unobservables which will eventually become known through their relations to current or future observables or unobservables.

Because science deals with unobservables (though, of course, not exclusively), the rise of science has been matched by technological developments which have enabled discovery and verification. The development of scientific theory includes understanding the methodological role of instruments, a role which is related to the intelligibility of what is being studied. The understanding explains why the "observed" is "data".

Why the dependence on signs versus "experience"? Insight requires images. Whereas initial insights are into the intelligibility immanent in images, the more recondite are into the intelligibility related to signs. In the case of signs, there already is an intelligibility for us which may or may not be conceptualized. Using the clearest example, in cases where it is conceptualized, the subsidiary manipulation of signs in trying to understand the undiscovered implications of what we already understand or know exploits the imaginal in conditioning the emergence of insights. Mathematics is the clearest example. Thus there can be a spontaneous attempt to make our concepts consistent with one another. When we are conceiving, we may not be satisfied with our formulation of the insight until it is consistent with what we already understand or know. Once we understand logic, we can recognize that a scientific theory, in its term, needs to be consistent and make that a principle for accepting additions to a paradigm or a theory. This renders greater control of meaning. Thus, Galileo accepted as a scientific principle that the mathematical implications of the mathematical relationships discovered and confirmed via experiments and observations were themselves hypotheses that needed to be verified and that we would expect to become verified given the truth of the prior discoveries. Formal relations can suggest plausible hypotheses.

Though numbers may not be particulars themselves, they do provide a means for understanding the interrelationships of particulars as such, whether we want to understand these as things, qualities, measurements, or most generally, relata. It makes no difference mathematically if the particulars are observable or not. Thus, the use of mathematics makes possible the reasonable postulation of unobservable things and events and provides a means for understanding their interrelationships. Moreover, it provides a means for understanding them independently of sensing since we can move beyond the observations to understanding the relations which explain the observations. In some sense the observations are given. The relations, on the other hand, are discovered and then conceptualized mathematically. They are verified via measurable observations. [In the human sciences "formal relations" as the logical implications of a theory which have not been discovered in data (i.e. inferences regarding the unconscious) can be verified via theoretically informed data.]

The remote possibility of a science of the unimaginable and the reality for us of things and events we cannot in principle experience rests on the cognitional fact that verification in knowledge of facts relies on observation which in turn relies on someone's immediate experience, but that discovery does not. Now, we can have insight into our immediate experience. However, when we have insight into our immediate experience for which there is a meaningful context. So the insight can be into more than the experience. The meaningful context is matched by language and other skills we utilize to understand. It is more common to have insights into what we imagine. This means we are not restricted to reality being empirically given. Instead, we are restricted in knowledge of facts to reality being empirically verified. This is the general form of Pierce's critique of the limitations of Kant's notions of phenomena and noumena. (According to Karl Otto-Apel.)

Now we get to the understanding of the conscious performer. First we need to understand the general form of performance. Second, we need to understand the nature of wholes. Third we need a general notion of the complementarity of the sciences in understanding wholes. We can illustrate this in terms of understanding contexts in terms of iterative understandings using the secondary notion of the operational situation.

For humans, self actualization is the free, conscious, coordinating of operations and acts in a performance. A performance has a beginning and an end. Consider juggling, for example. Most of us can toss a ball in the air underhanded and catch it, but fewer of us can do this continuously with three balls as a juggler does. The juggling performance begins with the initial toss and ends with the catching of the three balls or it is interrupted with a miss.

A performance is the smallest concrete intelligible sequence (unit) of activity in terms of which operations and acts derive their functional meaning. As we develop, performances become more intelligent and meaningful. The body, and particularly the brain, enables performance via the flexibility of processes embodied in performance. In other words, operations are available which can be freely and creatively combined.

The most general definition of an operation is that it transforms itself or something else. For example, the operation of multiplication transforms the multiplicands into a product as addition transforms numbers into their sums. The operation of unscrewing a lid transforms an unopened jar into an open jar.

We know that there are conditions for my performance, enablers of my performance and aspects of my performance which are not for consciousness. Though they may in some sense be part of the operational situation in the broadest sense as the situation for the organism, they are not in the narrower sense of the situation for consciousness. Thus we know, for example, that by inhibiting the reuptake of different neural transmitters we can cause particular types of changes in moods. There is a biological process occurring of which I am aware only in terms of changes in moods. Likewise, large scale neuronal group operations occur when I see. In one sense I am aware of a brain state via the visual experience, but I am not aware of the brain state per se. How do we explain consciousness, and in the broader case, performance, without "losing" it as conscious?

[Again, there are "elements" that enable experience that are not experienced per se. There is a sense in which we experience a brain state when we see, but our seeing does not provide the images and symbols needed to understand neural functioning as such, which must be understood to fully understand seeing as a brain state. It is these elements that need to be understood without "losing" the experience. The understanding of the brain needs to be compatible with the fact that the brain enables experience.]

We are in situations, but there are two senses in which we are. Instead of viewing the living being as simply within a situation as a third party would, situations can be understood in terms of the operations of the organism. This is the operational situation. It is defined as the complex of factors which can be organized to perform an act and the context for the organism in which this occurs. The context also is constituted in terms of the organism's operations. If we consider sensing in this context it means that there is a wider range of light and sound waves in the "objective" situation and that sensitivity is the neurological interaction with a subset of waves in the constitutive of our operational situation. So to follow the lines of Merleau-Ponty's argument for the primacy of perception, there is only a situation for us in the first place due to our somehow constituting it. So we cannot "lose" consciousness explanatorily in understanding performance because performance occurs within a situational context constituted by consciousness.

It is fruitful in understanding the operational situation to think of it solipsistically, for that is illustrative of how involved we are and is akin to a phenomenological reduction. What we really are doing is thinking of the situation in terms of our operations within the intellectual pattern of experience. But how do we avoid solipsism or idealism?

A first point is to note that there is a distinction between constitution and creation. We constitute the situation, we do not create it. Though the situation is what it is for us based on our subjectivity it is not created by us nor is it "merely subjective." Thus, all life has the evolutionary homologue of intentionality implicit in its relations to what it is not. The other for the organism is there for it by virtue of its operations. Thus, there is a particular type of food, for example. Living things emerged not as closed systems, but as whole sets of schemes of recurrence that incorporate what they are not. The other, as what organisms relate to, evolves as a correlate of organisms' evolution. Thus, in a sense, operational situations evolve.

There is, then, a primordial possibility for objectivity in the difference of self and other. Until absolute explanatory objectivity is reached, there is an inadequate account of

the distinction between the relation of things to us/our relation to things and the relation of things to one another. There is almost always an inadequate distinction between the relation of things to us and the relation of us to things performatively. Sensing and thinking are by identity though there is difference in the extroverted stand and in the fact we can think about things related to one another. With judgement the distinction becomes adequate implicitly, or operationally.

I am going to skip the intermediate discussion of different notions of objectivity and different ways of distinguishing ourselves and the other. Briefly put, "at the end of the day" we find differences within the unity of consciousness, not ourselves as a conscious unity within a field of differences. The archetypal case is reflective understanding which leads to the assent of judgement of facts. All the key elements are arrayed for consciousness. Self and other are both operative in a sense, but kept structurally distinct. The key to understanding this is to distinguish the conditions for knowledge from the conditions for being. Any contingent being is conditioned. As existent the conditions for its existence have been fulfilled. For Lonergan it is a virtually unconditioned. Judgement, likewise is a virtually unconditioned. The conditions for a simple judgement of fact consist of the evidence which, if it is recognized to exist, would lead to the reflective insight linking the conditions with the conditioned yielding the assent of judgement. Now, the key here is that the conditions for knowing differ from the conditions for existence. Thus, evidence that a flower is beginning to bloom may consist in seeing the first hints of the unfolding of petals but this does not cause the unfolding of the petals. Thus, the other in this case is for consciousness in the conditioned. The conditions for assent can be separate from the other as conditioned, but they too may be other. We are there as conscious and as operative in the occurrence of the insight and assent. But within the process is the implicit recognition that we are assenting because of the evidence. This is illustrated when we try to convince another by getting them to attend to the evidence and the linkage between the conditions and the conditioned and not to our authority. If the judgement of fact illustrates the basic structure, there is reliance on antecedent events and conditions to get there. I do not want to reconstruct Lonergan's cognitional theory, but with respect to explanatory knowledge of unobservables we already have touched on the role of language. With language it does not matter if the other is experienced or not in understanding it. So the other can be for consciousness without being experienced. The flip side is that if the other is experienced, conceptualization transcends experience permitting intelligible linkages between what is experienced and what is not. Concomitantly, if we are understanding the relations of things to one another where we are not one of the things, we already have a clear incipient selftranscendence at the level of understanding since we are not what is understood. When we get to this point, imaginal and experiential distinctions are transcended. As noted, they are needed for discovery and, in the latter case, for verification, but once these are achieved intelligibility comes to the fore. It is in this arena that we find the whole of organisms.

What the organism is, then, is constituted for us by understanding. The organism as a whole is never present experientially. Nor is it the set of possible perspectival perceptions, for these would need to be linked in some way and that linkage is intelligible, or understood, not perceived. This provides the context for understanding the complementarity of the sciences and the basic meaning of the primacy of performance.

We need to switch from the notion of levels of organization to that of contexts. This is not simply a semantic shift or an attempt to make our terminology consistent within an

explanatory framework. Rather it means that concretely there primarily is one level of organization in performance. The physics of performance and likewise the biology of performance are on the same organizational level as the performance itself. They are aspects of it.

But then how do we understand the functions of individual cells or other parts of the body in a performance? If what we are trying to understand operates via principles that are quasi-independent of the principles organizing the performance, we can understand it in terms of the secondary notion of the operational situation. For example, during neural development nerve cells migrate to muscles where they make the connections with them that permits the contraction and relaxation of the muscle. There is a context in which the cell operates based on its capabilities. Likewise, a neuron in a neural column is in a situation where the context is other neurons in the column. Its action is dependent on its ability to interact with the other neurons. If, as Edelman thinks, the basic neural unit is the column and not the individual cell, then we have a recurrent situation with the column interacting with other columns via the massive coordinated firings of nerves within the columns. Thus we have the progressive nesting of contexts modeled on the operational situation. Though these contexts can be understood separately and imagined as separate, they are part of a single coordinated occurrence. A useful mathematical analogy would be a complex equation with operators and operands nested via parentheses. This discussion is necessarily heuristic because we do not fully understand any performance of any organism.

The above gives us some way of understanding the parts of a performance, but how do we understand the relation of the parts to the whole? In some views, what we are terming the parts, i.e. the neurons, would cause the whole, i.e. consciousness. In our view the neurons are part of the performance itself, so they do not cause the performance as would an efficient cause. Rather as part of the performance they are part of the formal cause.

We can discover correlations between conscious activity and brain activity, muscle contraction, etc. Just as a muscle contraction in my arm is part of the performance of lifting, so are the neurological processes. They are not the efficient cause, but the formal cause. They are part of the efficient cause of the box being raised but not of the lifting. Analogously the firing of a neuron as part of a column of neurons is part of the process of seeing which can be part of the performance of playing a point in tennis involving, if we are any good, multiple instances of hitting a tennis ball.

What does the correlation mean? It is not a cause, as in cause and effect, but a functional part. So it is not a cause, but a part of performance. This is the primary meaning of the primacy of performance. Performance plays a central explanatory role as the basic whole of human and animal activity in terms of which the mind and body are understood on the one hand and social interaction, institutions and so on are understood on the other. Our concern today has been with understanding the former. Performance is also primary in evolution which changes the understanding of how evolution is self-driving. That too is a topic for another day.

Finally, the role of the sciences is complementary in understanding the performance. There is a physics of the performing organism which differs from the physics of the atom. This is not to say that we have two different sciences, but two different applications of them. In the application there are indeterminate specifications of

general laws which distinguishes the physics of the organism from that of the atom. Relations are possible, as events for example, on the level of the organism that are not on the level of the atom on the basis of the physics of the organism. The same is true of the other sciences. Since each science understands aspects of the performance, a single performance requires understanding by multiple sciences to be fully understood and the relationships among the sciences is neither reductive nor hierarchical but complementary.