Getting Rid of Metaphysics

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When Immanuel Kant was awakened from what he termed his "dogmatic slumbers" by reading David Hume, he decided that there could be no justification for the metaphysical speculations of his day, and set out to discredit them. History has judged him correct — i.e., on the thought of his day, which was much given to speculation beyond experience, founded on nothing more than the common assumptions of society. Naturally, modern thought since Kant has attempted to defend itself from any accusation of "metaphysics." Since that thought has been deeply invested in the results of modern science, however, it did so by assuming that Kant's project had been carried through by science. This conclusion followed from translating "metaphysics" as "beyond the physical," and substituting "physical reality" for "experience." The last substitution was made in order to advance a notion of reality that could not be identified with experience, but that very restriction has turned out to be problematic.

The Two Meanings of "Metaphysics"

Aristotle did not use the term, but certain books of his became known as the treatises *ta meta ta phusika* — what comes after or beyond the physical (*phusika* derives from *phusis*: "Nature" — both in the sense of "the world of nature" and "what something is by nature" — its kind, sort, or species. And since the root *phu* carries the meaning "to grow," and the ending indicates activity, we can gloss the term as "that which comes to be," "comes to itself," or, in Heidegger's interesting gloss, "that which comes to appearance"). Thus the title, given to treatises on what Aristotle himself calls "first philosophy," could mean anything from the rather mundane "the books after the *Physics*," since this section followed the *Physics*, to the rather profound "study of those principles that make natural things possible," which in modern terms would examine those relations necessary to thinkable — i.e., intelligible — phenomena.
The second of these is promising, since that meaning would also qualify Pre-Socratic philosophy, to which much of the Aristotelian text is addressed. Discarding the "books after the *Physics*," we are left with two important modern meanings for "metaphysical": (1) an echo of a possible original meaning of relations that make the world intelligible, and (2) the modern sense of speculations beyond the reach of physical evidence. Kant targeted the second of these, at least in intention, and labored to set out the first — the relations by which *experience* is possible. From these studies he hoped to discover the scope of knowledge to be gained from experience and its basis. How well he succeeded in this is another problem, which need not be addressed here.

On the other hand, the distinction between the first and second meanings above does concern us. The question of *how experience is intelligible* (or how cognition is possible, which amounts to the same thing) has already received an answer, implicit or explicit, by the time any other question about the world can be addressed. It lies in a prior position to all others. This reflection may explain why PreSocratic thought seems so much concerned with those principles that are found to be general to all experience, and why

Aristotle's treatises on "first philosophy" also generalize on the world of *phusis*. In his own way Kant tried to continue the same project, and such matters are still of pressing concern in European phenomenology, where the study of appearances gives rise to a theory of cognition.

The sciences, on the other hand, have generally not shared this excitement. "Appearances" (phenomena) imply human *experience* rather than *reality*, the way things *seem* to us rather than the way they *are*. The progress of science, in the usual outlook, is very much dependent upon the attempt to remove the differences between observers by deleting all observer contribution from the objects observed. Thus, research into the preconditions of *experience* in general, and a theory of cognition, are recognized as legitimate tasks in psychology, where they tell us about the *observer*, yet are labeled as speculative "metaphysics" when the intention is to learn about the *world*. After all, the conditions that attach to the observer may be general for all observations, but are not necessarily informative about the objects to be observed.

Two Ways of Thinking

Notice that the two meanings of metaphysics derive from two directions in thought — actually two ways of thinking — which result in two very different notions how the world is known. Let me illustrate what I mean.

Prior to any other conclusion of the usual "scientific" mode of thought, for example, one has already supposed a total independence between thinking and the objects of thought. The task of thinking is therefore the creation of an inward reflection, in thought, of an independent outer reality. As a plane mirror does not add to the content of the thing imaged, so thinking should simply reproduce rather than add anything of its own to the reality thought about. All authority, of course, rests with the external world, and thus some sort of physical test must support every conclusion about it. In this context, the accusation of metaphysics results from any attempt to allow thinking a more active role than that of a passive recorder.

By "a more active role" I mean to indicate the notion, central to certain forms of European philosophy since Hegel (although something akin to this is suggested by ancient and medieval thought), and particularly to phenomenology: namely, that in the moment of knowing the activity of thinking produces a content of its own, which content *supplements and completes* the sensible report. How this content can be brought forward *in the moment of knowing* will be discussed below, but suffice it to say now that if it is brought forward at that moment the contribution cannot be subjected to subsequent physical test. From this point of view it is the supposition of total independence — between thinking and the world — that is the most glaring metaphysical assumption.

It seems obvious that the first mode of thought characterized above [in the preceding two paragraphs - ed.] is not simply that of science. It seems to be the major attitude of the western world towards thinking since, perhaps, the writings of William of Ockham, and is most likely to be held by the average "man in the street." The second is less familiar in popular literature, but not unknown in academic, for it has been an uncomfortable problematic of western thinking since it first disturbed Kant in the work of David Hume. I think we will find that an understanding of the second mode is fatal to a confidence in the first.

Causality

Hume was an "empiricist" of the school of John Locke, and thought of his work as philosophy of science. It is somewhat surprising, therefore, to discover that he is also the thinker who has the reputation of

bringing down the empiricist dream of perfect knowledge through experimental science. He is little read outside academic circles, but his conclusions, if not his reasoning, have found their way into present practice. Although few working scientists think of it in this manner, the research program of modern science might be considered a response not only to Kant, but also to Hume, who began the former writer's revolt against metaphysics.

Hume had argued that there was no sensible evidence of causal relation in experience, and concluded that the idea of such a relation originated in the mind. If we turn to simple physics for examples, a cursory examination of the way in which we "see" causal relations calls to mind the accuracy of Hume's early descriptions. The simple notion that one event causes another is not, as Hume noted, based on a sensible connection between the two events, but on the fact that I can correlate the first event with the second. Such a correlation, however, does not suggest itself; I must be looking for it.

When I become aware of a change in the world before me I assume, immediately, that the event is an effect of some cause. Naturally there is no sensible identifier of these categories — the correlation is all that can be detected (thus Hume's problem). But without further evidence I am already sure that all *events* are *effects* — that is, are caused. The impossibility of making sense of the opposite — i.e., that some events are not caused — provides immediate evidence that we do not understand this to be an *empirical* proposition: it is not based on repeated experiences. After all, we are not open to contrary evidence — if our search for a cause is unsuccessful we never take this to be evidence of an *acausal* origin, but only of the need for further search.

Once I propose a notion of causal origin, I attempt to identify the cause of the event on which I have focused. Thus I am already advancing specific proposals of relation. In particular, if we are in the realm of simple physics, I am advancing inorganic causality: the relation of being changed-by-another. But now look *back* at the moment I begin my search. If I did not bring this proposal forward prior to any action on my part I would *not* be searching for a correlation (because I would not be thinking it).

Those who try to substitute the explanation that "perception" of the correlation suggests causal relation to us are forgetting their own experience (and Hume's argument). Technically a "correlation" of events is not a sensible perception at all, but a relation of perceptions within space and time. Hume recognized that causal correlations would manifest themselves as "constant conjunctions" — conjoined events occurring again and again. (He spoke of the "conjunction" as events found in the same or adjoining spaces at the same or adjoining times, and thus assigns no necessary chronological sequence to the correlation.) But while he admitted that one might discover, for instance, a constant conjunction between lightning and thunder, he also showed that the discovery meant nothing in itself. It could be considered evidence of causal relation only for those *who already knew* that the future would resemble the past (i.e., to the degree that the causal parameters were the same) — that is, those who already "knew" that all events were governed by causal law. If we did not already understand the world in this manner, what significance could correlations have for us? Could we even take note of them?

Again we must look *back* to the reason that "correlation" has any meaning for us. We understand that, due to causal law, causes and effects will be constantly conjoined, now and in the future. But it is this *understanding* that proposes the correlation, rather than the reverse. A correlation cannot propose the understanding because by itself it can only be what *has* happened. To suggest a "necessary connection" (Hume's term for causal connection) between the conjoined events is to speak of what *must* happen: that is, to pass into the realm of law. Mere events, however, reveal only what has happened, which does not yield the law of what must happen without the addition of some further principle.

Once again, looking back at common experience we can see this proposing activity at work. When we hear a noise while walking in the woods we look round for the source, by which we understand, a cause.

Eventually we find something to blame it on, or we give up, wondering: "Now what do you suppose caused that?" The idea of a cause comes first, and then a correlation, if one is found at all. At the moment of recognition the correlation came to our notice as an *answer*. If we had not been asking, "what caused that?" the significance of correlation could not have been manifest, and the correlation itself would not have been noticed (among, that is, the innumerable other elements that occurred within the same area at the same time).

Thus, Hume argued, while we cannot sensibly prove that we live in a causal world we still *assume* this — indeed, Hume denied that we could assume anything else, so ingrained is the understanding — and proceed as if a constant conjunction of phenomena were an indication of necessary connection (as it would be in a causal world). The resulting science would not be capable of *proving* theories (because we cannot prove causality) but only of *testing* them — i.e., detecting patterns of constant conjunction. In practice, therefore, we would propose hypotheses of relation that could give rise to a testing program, and alter or preserve such hypotheses as their predictions fail or succeed. The resulting picture fits the modern world very well. The program, in its increasing sophistication, has an impressive record of success, at least when judged by its own standards.

But its own standards may be inadequate to form this judgment. As the reader has probably noticed, the Humean discussion of causality appears to resemble the second mode of thought above, and thus is an approach suspect to the sciences. Is Hume not studying the necessities of human thought rather than physical evidence? The conclusion appears to follow from the argument. When we consider a testing procedure for individual causal hypotheses we can see that this is possible *due to our assurance* that constant conjunction is indicative of causal necessity. But when we examine that assurance itself, the principle of causality turns out to be far more than a hypothesis to be tested. The *possibility* of a test argues the prior establishment of principles that will structure the test and give it meaning. After all, we test by looking for correlations between phenomena, but such correlations have no meaning, and thus *the test itself means nothing*, unless they are invested with meaning by our causal premise. "Testing" the principle of causality is therefore a circular procedure, which cannot, by reason of its circularity, have any meaning beyond the assumption of the thesis to be tested.

But then we already know this. As I said above, the causal principle is not an empirical conclusion — we cannot imagine a sequence of events that would bring us to question our causal belief, and thus we cannot imagine how to test it. As we rise in the morning everything we do — our whole understanding of the flow of events — is premised on our causal understanding. Our very notion of experience would make no sense unless the past led to now, and now to an immediate future. But the "leading," so taken for granted, betrays the presence of a crucial principle of intelligibility. Why and in what sense will the future resemble the past? One event leads to another, earlier gives rise to later, but only because to our thinking earlier and later moments are connected by an unfolding causality. Causality in this larger sense appears to be a principle without which intelligible experience would be impossible. At the moment that we recognize the intelligible sequence of events, therefore, we do so through our own intentional activity. It would appear that the world of experience is not so independent of our understanding as first appeared, if the intelligible order we "see" so plainly is actually "constituted" by the same understanding.

Constitutive Ideas

Hume has argued very cogently that phenomenal causal relations "stand out" through the understanding of the observer. We might now have a look at what else could be constituted by the understanding of the observer.

I have introduced the terminology of "constitutive" thinking, or "intentionality" as it is termed in phenomenology, which will take a bit of explaining. By a thinking that is "constitutive" I mean an idea that we must "intend" in order to make the percept phenomenal — to make it an appearance of something — and not something added after the fact of appearing. Thus if we were to successfully "unthink" such an idea, we would also lose the phenomenon.

Let me use an example: The simplest military camouflage is paint — buildings to be camouflaged are painted with patterns similar to the surrounding countryside. When such structures are surrounded by heavy foliage the strategy can often fool the uninitiated eye. On the other hand, no amount of paint can entirely hide the geometric shape of the human structures with the rigid verticals and horizontals and right angles. Thus, the simplest way to "see through" such camouflage is to look for just these things. After all, the point of painting foliage-like shapes on the buildings was to allow the observer to find his or her own expectation met — we expect to see foliage, and think that we have when our gaze crosses the camouflage area. But when we look for verticals and horizontals, something we were not looking for in foliage, the buildings jump out. Of course, were we to look again for foliage the previous view can sometimes be reestablished, and the buildings vanish once more. The whole experience is quite similar to the "double-take," in which the first "take" produces a phenomenon that is later canceled by a new take, resulting in a second phenomenon.

Unfortunately we do not usually notice the element that has prepared for either phenomenon — that is, the intentional "take," or proposal, that we have advanced in order to perceive. We do not notice because during normal (successful) perception, our activity is utterly transparent to the object perceived, which absorbs all our attention. We attend to our own perceptive activity only when we set out deliberately to do so or when it fails, as in the double-take, and is no longer transparent to the world. At that moment perception calls attention to itself, and we reconstruct our first "take" as our own mis-take, and the second as our correction.

This sort of intentional shifting, taking and retaking, also happens with regard to language, which is itself phenomenal, and therefore dependent upon the same perceptive activity for its meaning. If I say, for example, "What frightened John was looking at Mary," one hears a specific meaning immediately, but the first is eventually followed by another, for the sentence is poorly constructed and admits of more that one meaning. The situation is the same with my students' favorite (imagined as *spoken* — if written with proper punctuation the ambiguity would disappear): "I know your plans don't include me." I leave the reader to find the other meanings since in these cases they are easily discovered.

Consideration of these experiences suggests that we see (or hear) only those relations that we have first (unconsciously) proposed. Or as Goethe remarked, we see only what we know. His statement would be absurd if taken to mean "what we have known before," since it would deny learning, but it makes perfect sense with regard to the intentional proposal. That is, we understand or recognize the sentence in a certain manner, and as a result, to us the sentence appears as a finished statement seemingly independent of our thinking (before we discover another way of reading), even as the phenomenon is brought to recognition by our understanding, and appears to be mere fact, independent of any participation on our part (before we discover another way of seeing). Goethe was evidently aware that the intelligibility of phenomena was a product of our own activity of understanding even if we were unconscious of that activity.

Steiner, in chapter five of *Wahrheit und Wissenschaft*, presents the matter as follows:

Thinking approaches the given content as an organizing principle. The process takes place as follows: Thinking first lifts out certain entities from the totality of the world-whole. In the given there is actually no singularity, for all is continuously blended. Then thinking relates these separate entities to each other in

accordance with the thought-forms it produces, and lastly determines the outcome of this relationship. When thinking restores a relationship between two separate sections of the world-content, it does not do so arbitrarily. Thinking waits for what comes to light of its own accord as a result of restoring the relationship. It is this result alone that is knowledge of that particular section of the world content. If the latter were unable to express anything about itself through that relationship, then this attempt made by thinking would fail, and one would have to try again. All knowledge depends on establishing a correct relationship between two or more elements of reality and comprehending the result of this.

There can be no doubt that many of our attempts to grasp things by means of thinking fail; this is apparent not only in the history of science, but also in ordinary life; it is just that in the simple cases we usually encounter, the right concept replaces the wrong one so quickly that we seldom or never become aware of the latter.

Here the insight is clearly stated, although it is easily misread by any who cling to a purely reflective notion of thinking, and therefore suppose that Steiner refers only to conscious hypotheses about given phenomena. When we consider that the first act is to "pick out" unities from the indeterminate given, it should be obvious that Steiner is speaking mainly of the thinking that one cannot observe but can only reconstruct, as we reconstruct the double-take. After all, we cannot watch the activity by which we came by a world of distinct objects any more than we can watch ourselves wake up in the morning, and for the same reasons. As Steiner adds in his reference to the double-take, we often do not even remember the original failure in our attempt to grasp a percept, for a rapid correction calls no attention to itself and thus does not come to consciousness at all.

If the manner in which we first become conscious of the world upon waking up in the morning is not open to an easy reconstruction, however, later moments of consciousness are. Take, for instance, the figure designed by Gaetano Kaniza, (1976) which produces a perception of a central white triangle by simply arranging the black circles with sections missing and three bent lines on a white background. The observer sees, apparently immediately, a white triangle in the center of the configuration, due to the manner in which the forms have been understood. Here is a case where the understanding that produces a consciousness of the white triangle can be reconstructed.

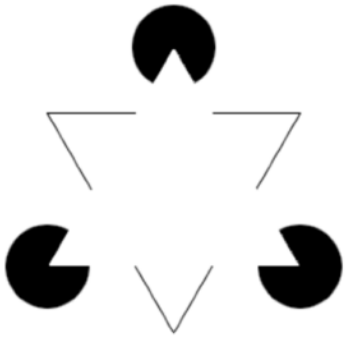

Figure 1

As the reader can verify, if the white triangle is seen, the underlying forms are grasped as *closed*, that is, the three black circles are complete and the bent lines are part of a continuous triangle. The foreground triangle lies over these forms and thus interrupts them. This triangle will appear somewhat brighter than the rest of the background, but the reader can mask of all but two elements — a circle and a bent line —

and see these elements as nothing more than a black circle with a piece missing and a bent line. There is then no hint of a brighter triangle.

Another Kanisza effect is the transparent surface. In Figure 2 below, the white oblong in front of the black forms is produced in the same manner as the white triangle of Figure 1. But if the dark forms are closed with a gray rather than black continuation, the white oblong becomes transparent or translucent, as in Figure 3. In this case, as in the former, the oblong appears to be brighter than the surround, and a contour is produced between the slightly brighter oblong and its duller surround.

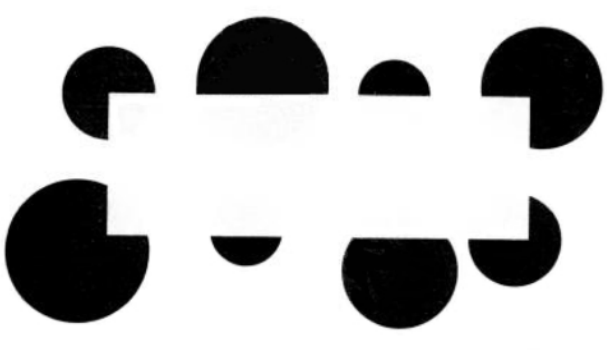

Figure 2

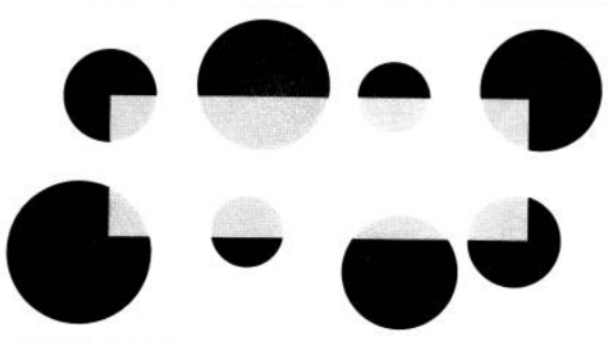

Figure 3

The translucent figure, of course, seems to arise in much the same manner as the original white oblong — i.e., seeing an oblong provides a parsimonious understanding of the gray areas — but such an understanding must be seen if it is to apply.

The temptation to suppose that we see the oblong first and understand it later — that is, to suppose it appears without any participation from thinking, so that our mental activity takes hold only after the fact — can be dissipated with a simple experiment. Let the viewer attempt to grasp the black areas as holes — in something like a slice of Swiss cheese — and see, through the holes, a gray oblong. Once the gray oblong is seen as a background figure, the apparent brightness of the foreground oblong has vanished. The new understanding of Figure 3 produces a new figure, which, of course, can be converted back into the old figure by a return to the old understanding.

For a further demonstration the reader may simply relax and stare at any of these configurations without concern for a geometric understanding. In this "vegetating" mood, the design elements seem to "swim" slightly and appear as nothing more than the elements that must be put on paper to get these results — for instance, three bent lines and three black circles with slices missing, or eight circles divided into gray and black areas. But the slightest attempt to make sense of the whole — i.e., to put everything into relation — will return the viewer to the bright white figure.

Let me review the ground carefully. As argued above, the viewer must intend the closure of the underlying elements in order to obtain the figure — ground separation that allows the white triangle to be the foreground. But it seems that this understanding must be advanced *prior* to our consciousness of the white triangle or white oblong. It is a condition *by which* we become conscious of the form, and not something added to the resulting phenomenon. Yet in the viewer's experience the white form is usually "there" from the beginning. The intention must be advanced *before* we are conscious of advancing it, since until the figure is seen we would not be aware of any necessity to advance it. We "pick out" the objects of the world, or make them stand out, *for consciousness*, and the mental activity by which we do so is *prior to*, and *productive of*, the resulting consciousness.

Let us take another example. In the surrounding world, closure is most often three rather than two dimensional, and this fact allows another form of observation. If the reader will simply look round the room, he or she will find that each object is conceived in terms of a three dimensional closure. Thus, the tree-trunk outside the window not only curves out toward the viewer's eye, but also, on the invisible far side, curves *away* from the eye. The invisible "felt" curvature is needed to limit the "felt" volume of the trunk, lest it move toward a volumeless veneer or expand toward infinity. As the objects in the room present themselves to the eye, they all appear according to the same law. Each is closed to its particular volume — the book, the box, the computer printer — each extends invisibly away from the eye as well as visibly toward it, or it would not possess the concrete presence that it does.

In this case the intentional contribution is quite clear because it cannot be confused with the report of the senses. The far side of objects is never available to sensible presentation, but must be included in the whole presented to understanding. Thus we are permitted to examine our act of understanding while it is still being maintained, and observe the manner in which it completes each form. The intentional faculty appears to bring the sensible situation, unintelligible in itself, to intelligibility, by completing what the senses leave in potential. After all, the senses in themselves do not *understand*, they provide sensation without relation, but phenomena are *recognized — i.e.,* grasped in terms of relations and thus understood to the degree that recognition has taken place.

The key to such recognition, as argued above, lies in the intentional activity immediately *anterior* to recognition. (By *anterior* I always mean causally prior, and sometimes chronologically as well.) The objects mentioned are already closed in three dimensions at first notice. The thinking that produces the closure, therefore, must already be in place when the experience is obtained, since our experience is of the three-dimensional form. Just as before, its activity is open to our inspection. By observing how we maintain the closure, we can reconstruct the activity by which we came to the experience in the first place. And once again, as above, the original activity had to be prior to, and productive of, the resulting conscious experience.

The investigation by which we have come to the above conclusions has allowed us to make specific observations of human perceptual and cognitive processes that are not available to the ordinary viewpoint, or ordinary consciousness. In particular, these results argue that thinking does produce a content of its own at the moment of recognition, and that the production of this content does tell us about the nature of the world — at least the *phenomenal* world.

Familiar experience is often adequate to demonstrate this point when examined critically. Most readers will remember looking into the surface of a shallow pond and discovering that one had a choice of looking *through* the reflecting surface to the bottom, in which case the reflections were not apparent, or looking *at* the surface reflections, in which case the reflected scene could be viewed but the pond bottom had disappeared. A related experience is even more striking, if harder to come upon. I was once standing on a sandbar in the shallow water of a rather quiet, sunny lake. Shallow waves — about three inches — were running regularly on the surface, distorting the otherwise clear reflection of trees about fifty yards distant. As I concentrated on the reflection, I followed the wave action only as regular distortions running though the picture. But then I noticed that I had lost any clear sense of a surface for the water, even as one loses the sense of a mirror's surface when looking at the reflections in it. As I looked for the surface, I found, to my astonishment, that the trees disappeared and a three-dimensional surface appeared, punctuated with three-inch waves running in rows toward the shore. As in the case of the reflection and the bottom, I could choose to see one, but not both, phenomena at a single time. We all recognize, of course, that both phenomena are "real." The necessity of choice in these cases demonstrates the necessity of the constitutive act. I had to choose my mental focus, even as I had to choose the focal point of my

eyes, but the latter followed the former, for my eyes could not attempt to focus on an element not present to the mind. And like the focusing effort of the eyes, it would seem, my mental focusing usually escapes my conscious notice.

The plasticity of phenomena to human understanding is not something that is explicit for the thinker who takes phenomena to be the immediate representatives of a world independent of mind. To this view the phenomenal things are simply "there" as we open our eyes, and no further activity on our part is indicated. To a phenomenological viewpoint, the phenomena are quite fluid, undergoing a mild metamorphosis as the understanding shifts its ideas. A student in my aesthetics course, which is much given to the examination of intentionality, reported to me after the course was over that he was surprised at the degree to which the phenomena shifted with intentional shifts. He was even more astounded that, although this evidence was "under his nose," he never saw it before. As we discussed at the time, if our intention is to see a stable world that is independent of our thinking, it is easy to edit out all evidence of connection as "mistaken seeing," and fail to take notice of this very editing.

The Living

By now it should be apparent that our familiarity with the world and our recognition of its nature are the results of very skillful if not entirely conscious activity. As children we evidently begin this working-into the world, and we continue our development, and the development of our phenomena, throughout life. Or at least we would continue it if we did not come to commit ourselves to belief in a stable, independent world, knowable only through the deletion of observer contribution. But at a certain stage of education, it seems, the editing function mentioned above becomes very pronounced.

Anyone who has bothered to watch this development can testify to the manner in which this editing process has demoted types of experience that do not fit the current model of physical reality. If we extend the investigation into our perception of the *living*, for example, we can find ample evidence of what I mean. Although our notice of the fact is characteristically vague, the *phenomena* of life are quite distinct from those of the inorganic world, and must be reported in a different manner. Notice that I am arguing not that we feel differently about phenomenal things when we take them to be alive, but, rather, that living things present a different phenomenal structure from the non-living. Although we all react to this difference, few will actually be ready to qualify it as a distinction between types of phenomena rather than a difference of human reactions.

As I type this article, for example, I can see my dog asleep on the rug. As I watch the even breathing, I do not try to correlate the motion with some other event in close proximity in space and time. There are many such events. They mean nothing — it does not even occur to me that the motions of the dog's chest are caused by some other object or event. I am grasping the dog, it would seem, by another mode of understanding.

The dog is, of course, alive, and this brings up a very different causal relation. The clarity we experience in the realm of things changed-by-another does not accompany us when we enter the realm of organic causality — the self-changed. We have no difficulty in seeing the dog move (which is *not* the same as seeing that the dog *was moved*), but when we attempt to think *about* the seen relation, new problems arise. For one thing we may refuse to relinquish the notion of changed-by-another, which leads to a reductionism in thought by which the life of the organism is approached only in terms of inorganic physical and chemical processes. And while we may be able to see that a causal correlation between two objects can be a matter of intention (after all it is pure relation), we may still have difficulty understanding how the organism itself, a sensible object, could be constituted through a causal idea.

Individual objects must first be picked out by the activity of thinking (intending), and then related. Unity is also a relation, and by it we entitize (make into an individual unity) the objects of our perception. But since an entity must be either changed-from-another or self-changed, a causal idea is already present by the time that we recognize what sort of thing it is — inert or alive. Seeing that something appears alive is a common, but habitually vague, experience. It is a function of the kind of whole we have proposed, and we lack focus because we usually look critically only at parts, taking the wholes for granted and leaving them unexamined.

I once experienced my own lack of focus in this department in a particularly disturbing way. On long drives dinner in less than satisfactory places becomes inevitable. After such a meal I made for the door with hopes of finally escaping the plastic plants that stood throughout the restaurant. As I arrived at the door and opened it on the parking lot, I realized that the large plant near the door, which I had seen as artificial, was real. I watched it "come alive" as my recognition set in. I felt accused of misprision by the plant.

Determined to be more sensitive to such things, I later experimented to find out what had to be done to see such things as artificial and what to see them as alive. Since it was quite possible to see the same object either way (at a distance the mistake is easily made), the distinction did not appear to lie entirely with the sensible situation but also with the way I took hold of that situation. As I deliberately switched back and forth, seeing the plant as plastic and then seeing it as alive, I found, for one thing, that I had to *understand* the appearance as an expression *that was not separated* from the causal power expressed. The plastic plant was, of course, long separated from the formative powers that had shaped it, but even while its parts were originally being shaped they were shaped only by "impressed force" — i.e., from without. But the living plant was in immediate relation to the causal power that manifests as growth, and therefore its appearance (when seen as alive) possessed an internal *potency-for-change* that was entirely lacking in the plastic version (assuming, of course, that I understood the object as plastic). I think that this felt potency would normally be called life, although in this case it had expression only in growth.

When we look to the animal we can say a bit more — namely, that to recognize an animal at all we must understand it as an expression of causal power that is colloquially termed "behavior." Let me reconstruct the reason for this by recovering what we "already know" about living phenomena when they become phenomenal. On walks in the northeastern woodlands of the United States one often observes whitetail deer. These animals sometimes "freeze" as you look towards them, apparently hoping to fade into the cluster of tree trunks. Sometimes I have been unable to pick out such an animal — seeing only a cluster of trunks — until a friend pointed to it. Then the form that I took to be part of a large tree becomes the partially visible deer standing behind the tree. The situation is common enough, but look more closely. Even after I have seen it, if the eye (or the mind) wanders just a bit, I must work to get the deer back. The body of the deer can too easily slip into the shapes of tree trunks if I do not maintain the idea that allows me to pick it out.

The idea includes, of course, an understanding of shape, which I can close (as discussed in the preceding section) once I understand the shape of the deer as lying behind the tree and partially occluded by it. But there is a causal component as well. When a deer "freezes" in the forest in order to escape notice, what it has done is in the verb active — it *"holds still."* But rocks, or tree trunks, while they *are* still, cannot "hold still." Their demeanor is not behavior, but that of something changed from without or by growth respectively.

Again distinction lies in the manifestation of causal power, and it must be in place as we make the percept phenomenal (pick out the entity). Once we come by an object, it would seem, the appearance is already either inert or alert — the choice of organization has already been made. (We can be fooled, of

course; a dead twig may turn into an insect, but this simply leads to replacement by another appearance, as in the case of a double-take.) A rock has no present connection with the powers that gave it shape and location, nor does a tree trunk, even though a living product, exhibit behavior. A phenomenal animal, however, is constantly expressing the power of movement, always making a gesture, *even when "holding still."* We should not be deceived by the bias of the editor — if an observer does not grasp the object in this manner, he or she *cannot see a living animal*.

Interiority

The language of the last paragraph speaks of "expressive" appearances, something that is not much found in the language of current biology. The term "express," from the Latin roots *press* (press) and *ex* (out), invokes an impression often thought to be a subjective addition to the phenomenon by the observer. But by now the reader should have noticed that it seems more like a specific phenomenal structure. Expressive appearances exhibit the quality of *transparency* — one level shines though another. The distinction between "levels" here, however, is not one of "physical" distinctions but of causal ones. Consider, for a moment, the face. Even animal faces are highly expressive, as anyone who has had the experience of being warned by a cornered cat will know — that is, what the cat *means* by the expression and sound is painfully clear. The face is perhaps the most transparent phenomenon in nature. As we trace the constitution of such phenomena, we see that the "expression" of the face, animal or human, is not understood as causing, but as caused. The activity of an inner agent seems to become visible through the behavior of the face, since the latter is in immediate and unceasing connection to the causal agent. And this inner/outer causal structure is what we term "expressive."

Seeing faces appears to be something any child, and perhaps to some degree, many higher animals, can do. Yet the accomplishment can be undone. Were we to lose track of the organizing idea of causal relation, the face can lose this transparency, degenerating into an appearance unrelated to faces. I remember reading, sometime in the sixties, the report of the subject of an LSD experiment. The subject, looking into the face of the interviewer, described a "sort of super-turnip," with "hairy roots" on the top, "symmetrical creases in tissue" and "two balls of colored jelly" in the upper half, a "bulbous protrusion" in the middle, and a "red wound" in the lower (done from memory — I could not find the reference). The picture is recognizable, but the observer seems to have gotten everything the wrong way round. The phenomenon he describes, which one can almost see in the imagination, is an object rather than a face, and if he can still propose a vegetal organization for the percept, he cannot understand it as a transparent structure that could *behave*.

One of the most striking aspects in the description above is the opaque quality of the "balls of colored jelly." This image is technically correct, but it reveals nothing of the eyes as eyes — we could not "see" an attention proceeding from "balls of colored jelly," but we do grasp the faces of animals and people in such a manner that we "see" such directed attention proceed from living eyes. Such an impression could never be derived from "balls of jelly," for as Coleridge once remarked, "objects *qua* objects are fixed and dead" — an inert occupation of space. By contrast, eyes as eyes allow us to "see" something more than their physical structure. We follow the activity of an inner agent through them.

The notion of internal here is, of course, not a spatial one. Cause is prior (at least causally) to its effect, and thus the source of facial expression must be *anterior* to its expressive gesture. When a phenomenal show allows continuous activity to be viewed through what is grasped as immediate results, the element that *is* transparent is an "outer," while that *to which* it is transparent is an "inner." The anterior component appears as a causal *interiority* in the phenomenon, a source for the outer behavior.

The objection that the resulting phenomena are "not really there" would really be something like an objection that the reflections of the trees on the lake were not really there, and only the waves were real, or *vice versa*. The fact that the reflections were constituted by a certain way of seeing does not make them unreal, any more than the same requirement made the waves unreal. Even so, the behaving eyes are not unreal, any more than the "balls of colored jelly" are unreal, since both must be reached by a specific act of understanding. In this case, however, that fact that the balls of jelly are still available to be seen would be important had we reason to examine the eyes for physical injury or look for cataract formation. Notice, however, that to see the eyes as mere physical objects requires real effort when we are watching a face from good watching distance. Even the doctor, who was treating the eyeball for an abrasion a moment earlier, shifts his mental focus immediately when he steps back and tells the patient about the injury. At that moment the merely physical structure of the face becomes an unactualized potential in order that something else can come into view.

I said above it is the interiority that becomes manifest through this cancellation of the object *qua* object, but in the case of human physiognomy this way of speaking may leave out as much as it reveals. The face, and to a lesser degree the whole body, are *gestural* phenomena — the gesture of behavior communicates a content to the observing mind. When we witness the gesture, however, we see it as *meaning*. And we understand, of course, that meaning is meant by someone. The gesture has, therefore, two levels of interiority, the meaning and the being whose meaning is expressed. Again these are types of causal differentiations, but more subtle than the distinctions made earlier. Yet because they are causal we may still follow the perceptual relation of the levels.

Even in the imagination gesture becomes dumb and degenerates into mere animal movement if it is without a recognizable meaning, for meaning is the immediate maker of the gesture. The gesture becomes expressive, therefore, and is properly gesture, when the mind advances a meaning that constitutes the gesture. For the perceiver, the meaning forms the phenomenal gesture and not the other way round. Even so, the meaning grows in specificity and nuance as our understanding of character develops. It is, after all, the character behind the meaning that means it, and can do so only according to his or her own nature. When the writer of the fourth Gospel addresses his readers as "little children" (throughout John I) those who have an appreciation for his work do not find the epithet patronizing, but they might very well hear something else if the phrase came from another mouth. Our understanding of his person constitutes the meaning of his phrase.

If the analysis of these phenomenal structures seems to represent a difficulty, we should remember that actual recognition (to the degree of our capability) does not. Any child learns at a rather young age to estimate the meaning of words according to the person speaking. The child does not learn *to think about it*, in any adult sense, but learns to *hear* it. After all, such understanding is phenomenal.

Knowledge

I realize that in the preceding discussion neither "knowledge," "ideas," nor "thinking" are used in their expected sense, and that my altered usage may raise concerns. Indeed, I would hope so, for my argument turns on just this point. The examples I have examined all suggest that the first object of knowledge must be the phenomenon *as* phenomenon — that is, our recognition of intelligible appearances. In this recognition, of course, the term "idea" takes on a new usage as the intentional contribution by which we make the recognition, or become conscious of the phenomenon. Finally, "thinking," in this complex, is the activity of orienting toward the world, or finding a way of seeing (using "seeing" for perceiving in general).

I see no reason to suggest that the more common usage of these same words is not also viable, but such usage is bound to activity that can only follow, rather than precede, the stage of recognition which I have examined. After all, discursive thought is possible only through the anterior intentional constitution of language. A moment's consideration will show that without the recognition of the signs as language, the word sounds that we pronounce or call up in inward memory are dumb, and useless to our project of discursive thought.

If this argument is not justified then much or all of the discussion above is nonsense. If it is justified, however, the notion of thinking as a non-participant "reflection" can no longer be sustained. Let me review the reasons.

Thinking, in all views of the matter, begins with a concern for *something beside itself*. (The problem of the self-grasp of thinking arises later, and no one would suggest that it is not a participant in that study.) Again, in all views of the matter, this other-than-thinking is a demand of experience. We have little choice but to recognize it.

Experience, however, is always intelligible — always recognition of the knowable, and the demand of otherness is no exception. At this point, however, the notion that we "just see" outward things is no longer tenable. A closer examination of the perceptual function will show *how* the actual grasp of otherness arises.

If the above conclusions are correct, a sensible situation is unintelligible without relations, and can only gain them from an intentional proposal. On the other hand, an idea cannot be objectified without the other-than-thinking percept towards which it is addressed. Without the intentional proposal there is no way of grasping the percept; without a percept, however, such constitutive ideas have nothing to constitute. Thus not only is the intentional idea addressed toward the other, but it comes to nothing if it cannot illumine the other. Our thinking activity is objectified only through the percept, and the discovery of the other is the discovery *of this necessity*.

It is enlightening to reread the Steiner passage quoted above in this light:

Thinking waits for what comes to light of its own accord as a result of restoring the relationship. It is this result alone that is knowledge of that particular section of the world content. If the latter were unable to express anything about itself through that relationship, then this attempt made by thinking would fail, and one would have to try again.

Notice the shift in the active voice away from thinking. Our activity "waits" upon the phenomena, for "what comes to light *of its own accord*" is beyond our ability to decide. An intentional proposal comes to nothing if the "particular section of the world content" is "unable to express anything about itself" through that proposal (through the conceptual relations advanced), and "one would have to try again." The need of our activity to form a unity with the other is striking in this wording. Our intending activity responds to and is directed by this need.

Steiner's passage is specific about its implications. Only ("alone") the "result" that "comes to light of its own accord" is knowledge. Even so, in the examples discussed above the sense that we can see the world does not arise until we have advanced a way of seeing that allows a section of the world to stand out. At that point only do we feel that we can claim *experienc*e in the sense of the *evident*. As we all know, this remains a powerful claim — the "observation statement" of science rests upon it, and presumably our own conviction that there *is* an existent world rather than nothing. Yet the foundation of such knowledge is the unity of subject and object and not their independence.

Experience belongs to us, and only within experience does the *evident* arise. But we are now in a position to see why the world appears to us so clearly. As I have argued above, the phenomena cannot become except as they express themselves through the understanding we have proposed, and they *appear*

in the form of our understanding. Thus they are not only phenomenal facts, but also psychic facts, since we can know our own understanding. The impossibility of separating these two aspects guarantees the intelligibility of their product. We may doubt that we really understand why things seem as they do, but we make no doubts about the way they seem. That is immediately evident to us.

It is obvious that this conclusion undermines the usual formulation of objectivity, but I think that it does much more than that. It was our experience of the qualitative world in its apparent externality that provided the objects to be known in the first place, and all the *qualities* of existence, including "existence" itself, are still abstracted from the same experience. The theoretical displacement of "physical reality" to a position beyond the phenomena rather than in them does not free us from the necessity of abstracting our meanings from experience. When discussing the meaning of observer participation in phenomena, a colleague who had some expertise in the area dismissed the notion of a participation in reality with the remark: "But I still have to believe that there is something *out there*!" — that is, something beyond observer participation. His model of knowing was still reflection, but he had to borrow the phenomenal "outness" — the perceived "external" relation of bodies to one another — to describe the relation between the observing subject and observed object.

We should be more concerned with the sources of meaning. In the examples above, meaning is advanced by our intentional activity in response to potential experience, and we become conscious of it though actual experience. Our participation in experience, therefore, appears to be our only source of meaning (beyond, that is, the purely formal meaning that intentionality is able to postulate in pure logic and mathematics). The reflective model of knowing had assumed an understanding that is to be achieved without participation, but at this point that seems to be an empty category. Understanding and experience are inexorably connected, which connection does not argue the limits of human understanding, but rather the fallacy of modern metaphysics.

I do not mean the metaphysics that scientific thinking rejects, but the metaphysics underlying its own approach. Let me explain. If the total independence of thinking from the objects of thought is taken to be a basic principle, then the task of thinking is to create an inward reflection, in thought, of an independent outer reality. But as a basic principle, this must be assumed at the outset of our science. After all, if we do not assume the principle, if one were to question the independence of the objects of thought from thinking, as I have done, the investigation could not be mounted on the reflective model, and such thinking would not be "scientific." The "metaphysical" basis of science, in the modern sense of a principle adopted without evidence, shows in the conspicuous absence of a form of thought which could investigate such evidence. Scientific thinking is limited to a form of thought that cannot question its own premises.

I think it obvious that the problem set by modern "realism" lies in the difficulty of knowing a world that is not participated by our knowing. This insistence generates particular notions of both knowers and known, which notions are broadly contradicted by the nature of our experience. It will eventually be discarded, and with it, I think, will go all postulations of existence that are structured by the same notion of thinking. I do not want to identify these postulations; they are legion, and are found in every form of modern thought — religious, scientific, psychological, etc. Instead, I would like to invite the reader to work through the phenomenal accounts given in this text, and trace the movement of his or her own intentional understanding within the phenomena. Through this exercise we can work out our cognitive act for ourselves, and discover why new understanding is always accompanied by new experience, and vice versa: the one is tantamount to the other.

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References and Notes

Readers who would like to read Hume's argument for themselves would do best to try the presentation of it in the source of my terminology, the *Enquiry* (below), rather than the earlier *Treatise*. Those who would care to review phenomenology would probably be best served by the Husserl texts, or the commentary by Levinas. The translation of the Steiner quotation was taken from the translation listed below.

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