

**Through the Inverted Prism:
An Exploration of Ambiguity in Art**

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I

Among the various characteristics that can be said to distinguish the enterprise of art from other domains of cultural activity, perhaps the most curious is art's close relationship with—and favorable attitude toward—ambiguity. Indeed, even when one considers some of the other of art's attributes bearing the quality of strangeness (its utter uselessness, for example, in a world full of useful things), this alliance between art and ambiguity remains uniquely prominent. That art has universally given a central role to this most mysterious and inscrutable quality renders the subject fertile ground for exploration.

To obtain a good sense of the strangeness of the relationship between art and ambiguity, one need only consider, by way of contrast, a few other disciplines in which ambiguity figures, if only as the unspoken force against which all strivings are to be conducted. The most striking contrast is to be found in the example of science, where ambiguity is nothing short of anathema, the ultimate goal of science being a complete, accurate, and precise description of reality. But other, perhaps less obvious, examples abound. In the high-tech field of modern medicine, ambiguity is to be avoided at all costs; in diagnostic analyses, in pharmacology, in surgical procedures or medical treatments of any kind, exactitude and precision constitute the goal anything short of which may be considered, justly or otherwise, grounds for malpractice. In engineering, in the making of useful things that work, there can be no allowance for uncertainty or vagueness of any kind; even the most rudimentary arithmetical error can lead to the collapse of a structure. In the law, legal codes and contracts must be spelled out to the greatest possible degree of precision if they are to be effective, a situation whose near-parodic abuse has given rise to that sub-species of the English language known as Legalese. In cartography, the systematic discipline of mapping and navigating space, ambiguity is, again, anathema; if a map is to be functional (which is to say accurate), it must show a one-

one (as opposed to one-many) relation between the representation and the territory represented. The list could go on indefinitely, for it seems we live in a world whose parts function in direct proportion to the degree to which ambiguity has been eliminated from them.

Against the towering backdrop of all these precision-oriented and ambiguity-averse realms of cultural practice, the singular fondness of art for ambiguity looks very peculiar indeed. This is all the more so when one takes into consideration the seemingly endless list of triumphs achieved by the above-mentioned fields within the last century. As field after field has joined in the grand march toward certainty along the road of exactitude and precision—and this, perhaps justifiably, with all the sureness of a team that has never lost a game—art has remained firmly rooted in its native soil, where meaning is terminally imprecise, fuzzy, and vague. This is not to say that art refuses to progress or evolve, for clearly that is not the case. Art has always sought to actively engage its times, sometimes by taking on the role of mirror to the culture, but often, and more significantly, by raising questions and reifying concerns well in advance of any broader cultural awareness of the issues. The question lies in *the way* in which art chooses to present itself, in the manner in which its meanings are generated and transmitted. *Why ambiguity?* Especially now, in the midst of so much gainful precision—and with the increasing availability of ever-sharper tools with which to achieve it—why does art persist in its use of a language that appears to be precision's very antithesis?

Before going any further, it is important to specify what is meant here by ambiguity—to become, indeed, more precise. In a general sense, ambiguity is synonymous with vagueness, which is the opposite of precision. All three terms—ambiguity, vagueness, and precision—are characteristics or qualities that refer to representations, or to whole systems of representation, of which the English language and mathematical notation and art are all examples. For a rigorously precise definition of the terms there is no one better to turn to than that high priest of precision, Bertrand Russell. In a 1923 paper on the subject of vagueness, Russell states that "a representation is *vague* when the relation of the representing system to the represented system is not one-one, but one-many."¹ Russell might just as well have used the term ambiguous instead of vague, for the etymology of ambiguous indicates that it combines the Latin *ambi* (multiple) with *agere* (to drive or lead), hence: leading out in many directions. With respect to meaning, which is our main concern, Russell points out that all languages are inherently vague to some degree,² with the sole exception of symbolic logic, a language which was invented (by Russell himself, incidentally) for the very purpose of abolishing ambiguity once and for all. We might, then, imagine a continuum for systems designed to generate meaning, where on the one end would lie the language of symbolic logic, in which there is no degree of ambiguity, and on the other end the language of art, which has of all the languages the very highest degree of ambiguity. All other languages would fall somewhere in between these two poles.

Arch-logician that he is, Russell laments in his article the degree of vagueness, or ambiguity, inherent in all but his own special language of logic, for which most human interactions are, he admits, woefully ill-suited. In his lamentation, Russell muses that for him, heaven would consist of nothing but pure, unadulterated logic, wherein all relations between signifier and signified would be marked by the highest imaginable degree of precision and clarity. Down here on earth, however, things are never so pure, and Russell is the first to concede that, ultimately, precision is but an ideal toward which we can (and should) strive but at which we can never fully arrive. Given this, Russell implies that there ought to be a sort of standard of humanly attainable precision, everything falling short of which is to be considered, in his words, "muddle-headed."

So far we have seen ambiguity conceived only as a negative (i.e., as the negation of the positive value of precision). From this angle, it would appear that any symbol or system of symbols whose meaning is ambiguous rather than precise is so as the result of someone's failure—namely, that of the symbol-maker to communicate exactly what he meant. But this kind of ambiguity—the one born of incompetence or sloppiness—can have little to do with the kind that results from the deliberate, careful, and often agonizing creative process by which works of art are born. For here we are taking it for granted that the vast record of human artistic activity from as far back as the cave paintings at Lascaux up to the most contemporary works of literature, theatre, dance, etc. amounts to more than a mere colossus of failed attempts to say something meaningful and well. Clearly there is another, more positive sense in which ambiguity can function. If Russell's "one-many" relation results in an unfortunate vagueness in some contexts, it may in others function in such a way that meaning is enhanced rather than diminished, that expression is intensified rather than blunted. To distinguish between the two kinds of ambiguity, we can introduce the qualifier *generative* to refer to the kind which is intentional and positive (in the sense that it generates something), and let this stand in contrast to the negative kind that denotes the absence of precision.

Having set generative ambiguity apart from the muddle-headed species, several questions emerge. Of what special value is this generative ambiguity? What is its function in both the making and the experiencing of a work of art? And indeed, if we are calling it generative, what is it that this kind of ambiguity generates? To the questions of value and function the most immediately apparent answer might be that the use of this kind of ambiguity allows for art to mean not one distinct thing but a plurality of things simultaneously. Surely this multiplicity of meaning is one of art's defining characteristics, and it is the basis for the frequent use of the term *multivalent* to describe the "shape" of art's meaning. But its inadequacy as an explanation for ambiguity is revealed when it is seen that the quality of multivalence is not really dependent upon

ambiguity at all—that although the two often appear together, they are in fact functionally independent of each other. To clarify the distinction, we can imagine an artist endowing a work of art with multiple meanings simply by attaching to the work a sort of index of meanings, an array of options from which one could select, with each new encounter with the work, whichever meaning suited his mood or purpose. In this case, there would indeed be a multiplicity of meanings, all (presumably) of equal validity, but no ambiguity whatsoever.

It seems reasonable, then, to attribute to ambiguity some more fundamental purpose than the generation of multiple meanings, since its presence is not required to achieve that end. One thing that seems clear from the hypothetical situation sketched out above is that when meaning is rendered explicit in the form of a finite set of clearly delineated theses, we are no longer dealing with a work of art but rather a work of exposition. Can it be, then, that ambiguity functions as an agent of obfuscation, serving primarily to shroud meaning in veils and shadows so as to keep it forever just beyond our grasp? Again, it seems beyond dispute that there is something about hiddenness that is at the core of art's power. But it is unlikely that occlusion and obfuscation are the endgame of ambiguity, for whose interest would remain piqued if there were never any revelation beyond what little one could see through the veils and shadows? Surely art would not have the power it does if it were merely a game of perpetual hiding, hiddenness being interesting only insofar as it exists in a dynamic tension with its opposite, with revelation.

Ambiguity is indeed a more complex and multi-faceted phenomenon than first appearances would indicate. What is it that makes ambiguity such an effective means of communication? Why all the subtlety, the equivocation? Given that art has something substantial to say, why does it not just come out and say it, concisely and precisely, directly and efficiently?

One can imagine other times and other cultures in which these kinds of questions would never arise. That they occur to us today, and that they are perplexing, are strong indicators of the degree to which science has pervaded every stratum of our culture. For clearly the ascendancy of science to its current position of unprecedented power and authority has affected every realm of culture, however remote it may seem from the domain of science itself. And perhaps more consequential than any other effect is the one that is also the subtlest and the least perceptible, namely, that which has occurred at the deepest level of the collective psyche. For it is on this level beneath consciousness that the power of science has altered the way we think about the world. Because it bears so heavily on our subject, it is necessary to explore in some detail the nature of this influence that science exerts on the collective mindset or worldview.

The achievements of modern science and technology are so widely acknowledged and so publicly celebrated that they need not be enumerated here. What stands in need of elucidation is the style or mode of knowing—the epistemological approach—that lies at the foundation of the entire scientific enterprise, giving it both its formidable strength as well as its inherent limitations. This approach to knowing, the analytic approach, is characterized by its reliance on the core values of measurement and quantification, and by its method of achieving these: that of incising, splitting, parting (indeed the word analyze means to render into separate pieces). Thus it is a knowing-by-parts, which is to say that it achieves its knowledge of things first by separating them into their constituent parts and then by determining how these parts fit together. Very much like reverse engineering, analysis makes ever-sharper, ever more minute incisions into the object of its study in order to gain a more and more precise understanding of it (both *incision* and *precision* being, appropriately, words that pertain to cutting).

This reverse-engineering approach is well illustrated by the history of science's search for the ultimate constituent of matter, for the primal "building block" of the universe. Long before the "discovery"³ of the atom, the idea was conceived (by Democritus, some time around the 5th century BCE) that there must exist some fundamental unit of which everything in the universe is composed. In the early 1800's, after the search had been on for centuries, the atomic theory of matter was confirmed and formalized by the English scientist John Dalton, and the spherical "solids" known as atoms were declared the smallest units of matter of which everything else is composed. But the atom's status of ultimacy was quickly disrupted when it was discovered, within the same century, that this primary unit could be further broken down into more primary, more elemental units: protons, neutrons, and electrons. Then, as the technology of precision instruments grew more and more sophisticated in the 20th century, it was revealed that even these "most elemental" units could be further cut into their constituent parts (e.g., quarks, neutrinos, muons, pions, etc.). The search continues to this day, as stranger and ever-more exotic "most ultimate" constituents of matter reveal themselves to our ever-finer instruments of detection.⁴

Science, then, is a fundamentally analytic enterprise whose pride rests in the awesome and increasingly belief-defying precision of its incising and measuring instruments. By and large, this approach has served science well⁵—so well, in fact, that its success has become the centerpiece of our culture. For who among us is not awed by the recent mapping of the human genome, or by advances in nanotechnology that will soon make it possible for a molecule-sized robot to enter the human body and conduct work at the sub-cellular level? And those of us who are not aware of current developments in science are still susceptible to this chronic sense of astonishment, for even the most quotidian devices have become computerized. Who among the lay public is not still utterly taken aback by the fact that the workings of these digital devices are

the result of electrical currents zipping through millions of minuscule transistors within fingernail-sized circuits? But this apotheosis of science is not without its costs. First and foremost among these for our purposes here is the way in which science's analytic approach to reality is internalized by all who stand in awe of its achievements. For every instance of incredulity and awe over the productions of science is also, implicitly, an affirmation of the supremacy of its way of knowing; in elevating the ends we also elevate the means. Like the child who unconsciously learns ways of being powerful from the dynamics demonstrated by its all-powerful parents, so we internalize the part-centric, analytic worldview intrinsic to the most powerful thing around us; its ways and means become our ways and means, its power our power, to the point where we find ourselves seeing the world not just *in terms* of the scientific worldview but *with* it and *through* it. Broadly speaking, science (and therefore analysis) has become the prism through which we see the world.

Through the prism of analysis, the world appears as an exquisitely engineered machine, made up of exquisitely rendered parts, each one perfectly separable from the others, and each assigned a value in accordance with its position in the hierarchy of parts. This worldview manifests itself on all scales and in every domain of culture. The hierarchical structure of society at large—with its elite minority at the top, which considers itself categorically separate from the sub-elite majority on whom it is actually dependent—reflects this worldview, as does the increasing degree of specialization within professions, where the separate specialties, each with its own narrow range of focus, are becoming more and more alienated from other specialists within the field and indeed from the field as a whole. Even more significant—because potentially disastrous—is that we see ourselves as separate from the natural environment—as self-sufficient, self-enclosed entities acting on other entities, and on nature as a whole, at no consequence to ourselves. On the level of the individual, the analytic worldview perpetuates the sense of the self as "solo agent," separate not only from nature but also from the rest of humanity, both of which, when conceived as "other," become hostile forces against whom one must maintain a constant vigilance.

Amid all the separate parts and entities of otherness that perpetually reinforce the analytic worldview and reaffirm the supremacy of science, it is easy to forget that science has inherent limitations, that there are things for which science and its approach to knowing have always been—and continue to be—fundamentally unsuited. Among these latter are the realms of human experience that concern values and meaning, which constitute a dimension that is impervious to the cutting and parting operations of analysis. Knowing in this dimension requires that we let go of the prism through which we see the multitude of finely rendered parts and return somehow to the original, inviolate unity from which they were excised.

It is to this forgotten whole that art directs itself, with ambiguity at its side. Both for the artist himself in his creation of the work and for the prospective entrant into the work, art necessitates a shift in orientation, an interior movement away from knowing-by-parts and toward whole-knowing. But with one's mind bent significantly in the opposite direction, the act of making this shift is not easy or casual. Art beckons, but why should one respond? Given that what it proposes requires a concentrated and deliberate act on our part, what propels or impels us to concede to art's proposal? And it is not just effort that art asks of us, but also a certain kind of faith, for the movement of mind to follow our concession will involve, necessarily, the surrender of a familiar frame of reference, which is never without risk. The shift in consciousness is not to be gained without the relinquishment of one's *terra firma* and the willingness to enter into *terra incognita*.

Any attempt to understand the allure of ambiguity, the mysterious pull that it exerts on our minds, must at some point touch upon the realm of psychology. It is often said that an artist is really someone who has not so much a great talent for art as a great capacity to tolerate ambiguity. This may be the case, but mere tolerance is not the whole truth; upon closer inspection it becomes clear that behind the inordinately high tolerance for ambiguity lies a peculiar hunger—a craving, even—that impels the artist to seek it out in spite of whatever resistance other of his faculties might launch against it. What *is* this drive, this psychological impetus, that would have one surrender one's analytic apparatus, prize of modern Western culture, in order to move toward something else? Surely no abstract idea holds the power to prompt such a shift; it must come from some deeper, more fundamental interior place.

The field of scientific psychology has made a variety of attempts to explain this temporary abandonment of reason, where, whether in artistic experience or religious experience, it has (in most cases) been regarded as a kind of descent into madness. Of all attempts to pathologize this experience, none is more famous (nor perhaps more wrong) than Freud's. For Freud, this return to original wholeness was seen as strictly regressive—as a psychological devolution back to the infantile stage of development before "self-object differentiation," as a backward flight from the demands of adulthood and autonomy into the bliss of infancy. The theoretical poverty of this view could not be made more clear than when we set it beside the enormous body of evidence to the contrary, i.e., the indisputable sophistication, profundity, and psychological complexity inherent in any of the greatest masterpieces produced by Western culture over the millennia. Could any of these works—that of Dante, of Michelangelo, of Dostoyevsky, of T.S. Eliot, of Martha Graham, of Ingmar Bergman—really be considered the perverse result of a failure on the part of the artist to meet the demands of adult maturity? ⁶ If not altogether preposterous, this view of the return to wholeness is severely limited. But if we find fault with Freud on this note, we may consider ourselves forever in his debt for that wonderfully poetic term he gave to this "backward" movement: the oceanic

experience.⁷ For to experience the dissolution of the structures wrought by the analytic mind is indeed like plunging into a deep and vast fluid field, rich with meaning but entirely without fixed landmarks or constructs.

Clearly there is some internal impetus other than the refusal of maturity that accounts for one's taking leave of the analytic mind to enter into the oceanic wilderness. That this experience has been linked with madness is unfortunate, because although there are indeed innumerable examples of artists and other "seekers" who have descended into madness (sometimes irretrievably), there are also innumerable examples of those who have not. And let us not forget about the countless people who have come to great works of art or religious texts "from the outside" (that is, as people looking for the kind of experience that only these kinds of works can offer)—can it really be assumed that their experience too was nothing more than a manifestation of their psychopathology? This rather hostile view of humanity gives us, by implication, the idea that normalcy and health constitute but a tiny pocket somewhere in the vast, multidimensional space of human experience; surely this region of non-pathology can be expanded to encompass more interesting and varied terrain. In the interest of this expansion, we will proceed under the premise that there exists, in a great many people, some non-pathological inner prompting which springs from some innate knowledge of the value of the domain of the ambiguous, and that there is a way to move in accordance with this prompting that is not regressive or degenerative.

II

Having established that ambiguity holds within it the potential for something of great value, and having indicated some of the difficulties posed by our present cultural mindset in letting that potential reveal itself, the groundwork has been laid for our entry into the question of how ambiguity functions in art. By way of introduction into some of the complexities of the subject, let us engage in a thought experiment of sorts. In keeping with the great tradition of the thought experiment, let us, for the sake of gaining the greatest possible insight into the matter at hand, allow the actors and situations in our experiment to be stretched and exaggerated well beyond the limits imposed by reality as we know it in such manner as is only possible in the laboratory of the mind. While such an approach will no doubt leave many of the subject's nuances untouched, it has the distinct advantage of drawing to the fore in just a few strokes those features that are most essential to the subject in question.

Let us imagine that we have an artist (of what denomination is irrelevant to our purposes here) who, after many years of creating works of high ambiguity, has just discovered Bertrand Russell, whose piercing

precision and immaculate logic have shaken the foundations of his world. So captivated is he by the flawlessness of Russell's exacting prose that our artist has become filled with doubt about the power, the coherence—and ultimately, the value—of his ambiguity-laden work. He has even come to suspect that ambiguity in art is little more than a gratuitous flourish, an artistic conceit, and that without it art might be a much more direct and effective means of communication. Since our artist is still quite confident in the content of his work (i.e., in the validity and indeed profundity of the meanings he tries to convey), he wonders if it might be possible to remain fully faithful to his meanings while altering radically the way in which these meanings are conveyed. He decides to conduct an experiment.

In his experiment, our artist will create a new work which, while retaining all the other elements he deems necessary for a successful work of art, will be thoroughly devoid of ambiguity; instead of using insinuation and suggestion, his meanings will be spelled out in plain English and in the most exacting and precise manner possible. (Our artist realizes, of course, that he will have to tolerate that basic degree of ambiguity inherent in the English language about which he can do nothing if he is to use English, and for which, as Russell notes, the blame lies squarely on our ancestors for not being sufficiently interested in rigor.) Since a work of art requires embodiment (even in the most "conceptual" works there is always some thing or situation or occurrence that serves as carrier of meaning), this new work will be embodied as marks made in simple black ink on a paper-like surface, which will be displayed on a wall. For the sake of thoroughness (i.e., in order to include all the components that make up a work of art except the one he wants to exclude), and because ugliness annoys him, our artist will use a beautiful, translucent vellum as the surface on which his meanings will be printed. The delicate beauty of the vellum will appeal to the senses and will therefore serve as the work's sensual component.

Our artist is very ambitious. On his first attempt at the new piece he will address one of his grandest themes: the mortality of man. Our artist proceeds, in the most precise and concise terms, and in bit-by-bit, analytic fashion, to enumerate his meaning. When complete, it looks something like this:

1. *All human beings have always been, are, and will always be mortal.*
2. *We toil all our lives in all manner of denial and defiance of this fact.*
3. *Alas, all our striving is in vain.*
4. *There is no escape from death.*

In a deep, velvety black ink the words are printed on the gorgeous vellum and hung on the wall for our artist's inspection. In just a few short minutes it is clear to our artist that in spite of the meaning's obvious

profundity (how many great masterworks have been created in its name!), this concise rendition falls short somehow; clearly there is something missing.

Not to be deterred by failure on a first try at anything, our artist prepares for a second attempt. This time, he will modify his technique considerably; he will give more specific information that is relevant to his meaning, and he will clearly indicate how each aspect of the main theme relates to every other. This time around there are many more elements to enumerate: Nature, Human knowledge, Tools and Technology, etc. The list is quite long, and diagrams and symbols indicating the many possible relationships between the elements are introduced. It is a rigorous piece of work; the theme has been fleshed out with the utmost clarity and to a considerable degree of precision, and nothing superfluous to it has been included.

When our artist is finally satisfied that he has created a thorough and complete enumeration of all the facets of his meaning that he wants to communicate to a potential audience, he stands back from his work to give it an assessment. In doing so, our artist is somewhat confounded to find that the piece is still not working; beholding it, he is altogether unmoved. The work fails to induce in him that distinct feeling (of precisely what he does not know) that successful works of art seem to generate. Has he left something out? Is there some crucial piece of the puzzle that he has absentmindedly forgotten to include? He checks his work carefully, and afterward he is able to reassure himself that all necessary ingredients have indeed been included. If the problem lies neither in the relevance or depth of the meaning, nor in the clarity and precision of its presentation, nor still in the sensuousness of its physical embodiment, where, then, is it?

Somewhat perplexed, our artist decides to set his experiment aside for a time with the hope that upon returning to it later he will have "fresh eyes"—he will be able to experience it anew, as no longer the product of his own labor but a thing unto itself. During the interim, our artist goes about his daily business, encountering various people and innumerable things each day, acquiring new experiences, having new sensations and perceptions, etc. When he returns to his experimental piece a week later, he notices something strange: the meanings and their various internal relationships of which he had been so sure and so decided just a week earlier now seem incomplete, underdeveloped. They are more or less right, he assures himself, but it is clear that they need further modification and elaboration in order to be truly rigorous. While making the required corrections to his piece, our artist recalls an experience he had during the previous week that involved the discovery of a shortcut to a complex operation in a computer program he is in the process of learning. Without the faintest clue as to why, our artist has the distinct "feeling" that this experience with the computer program has changed him, that it has mysteriously and inexplicably altered the way he understands his artistic meanings. This insight surprises our artist, but with some

introspection it becomes conceivable to him that perhaps all the experiences he has accumulated over the course of the week, no matter how small or seemingly unrelated to his artistic work, have changed, if only very subtly, his understanding of his meanings.

Suddenly our artist realizes that he has from the beginning omitted the element of time from his experiment. He sees that he will now have to devise a way to incorporate the passage of time—or, more precisely, the perpetual shifting, mutating, and evolving of his meanings—into his work. The solution is simple: each day he will create an addendum to his work with words, phrases, and symbols clearly indicating how each element has shifted in accordance with the day's occurrences (whether "internal," such as a memory, sensation, or perception, or "external," such as a social or political event). It will be an ever-expanding, ever-evolving piece, but with the aid of digital technology it will be manageable. It seems the experiment may yet be declared a success.

After several weeks the experimental piece has grown rather large, but each day's "master document" has been saved in digital form on a reliable hard drive after being printed on the gorgeous vellum and displayed on the wall for our artist's daily assessment. Each day, after making all necessary adjustments to the piece, our artist asks himself the crucial question: Does this compilation of words and symbols represent as accurate and unambiguous a statement as is possible at this particular moment in time of the meaning I want to convey about the mortality of man? Even on the days on which the answer to this is an unequivocal "yes," our artist remains quite unsure about the work's status as a great work of art. He struggles with this issue feverishly, until finally he decides that what he needs is the opinion of an objective observer—someone who can come to the work with no prior knowledge of its maker's intentions or even of its very existence. For this role our artist calls upon his trusted friend and highly esteemed colleague in the arts, hereinafter referred to as our objective observer. When our objective observer arrives, our artist gives him a considerable amount of time in which to absorb the new work, both in its original incarnation as a one-page document and in its current state of great prolixity. After several hours pass, our artist asks our objective observer to respond to the following two questions: (1) Has the meaning of this experimental work of art been thoroughly conveyed, to the greatest possible degree of precision (allowing, of course, for any and all vagueness inherent in the English language)? And (2) Does the work succeed in moving our objective observer in that distinct but nameless way characteristic of successful works of art?

It does not take long for our objective observer to respond. In fact, his response on both points could have been articulated very early on in his viewing of the work. He says: "Having studied the entire document that is spread out before me, I have no lack of clarity as to your meaning. For each and every element

within your meaning-system, you have given me, in the most precise and exacting manner, all possibilities for how that element might relate to each of the others. Since this configuration changes as a result of occurrences and events as you experience them, you have endowed your piece with the capacity for continual expansion—to be terminated only, I presume, at the time of your death. My opinion, therefore, is that one could hardly ask for more precision in your meanings. The problem, however, is just that: they are *your* meanings! As such they are very fine indeed, but where is the place for me in your work? I come to a work hoping to be able to enter into it, to be able to participate, somehow, in its meaning. With everything mapped out so tightly, there is no empty space left for me to move, much less to wander freely and let my imagination take me where it will. I am, in effect, locked out of your elaborate fortress. My point is that while I may be 'objective' to you, I am—I assure you— quite 'subjective' to me! When I encounter a work of art, I do so with my whole self: all my personal history, all my acquired knowledge, all the knowledge of which I am but dimly aware, the whole of my psychological disposition, my temperament, the unique shape of my intelligence, my likes and dislikes, etc. All of this—this entire set of 'givens'—meets the work halfway, as it were, thereby helping to give shape to and co-determine its meaning. If you really want me to experience your piece as a work of art, then, you might begin by changing your conceptualization of me—that is, rather than being your objective observer, let me be your subjective participant.

"To your second question the answer is an emphatic 'no'. If I cannot enter into the work, I cannot experience that distinct feeling of richness and depth—that feeling of 'being moved'—that I get from great works of art. Your network of meanings makes me *think* about a great many things, and I can agree or disagree, wholly or in part, with the many facets of your meaning and their interrelations. These thoughts give rise to certain emotions as I think them, but in no way am I moved in that way about which you ask."

To all this our artist replies: "Fair enough! Your points are good ones indeed. It is not at all right that you should be locked out of my network of meaning, because art is, after all, a kind of communication. I *need* for you as my audience to participate in my work. You say, quite rightly, that you bring your own subjectivity and all that it carries to my meanings, and that this joining of you with my meanings produces a transmutation resulting in meanings whose particular facets I, with my necessarily limited subjectivity, could not have foreseen. Let me, then, invite you to truly participate in my piece! All this requires is that you add your own meanings, represented by words and symbols, to the piece. And since you, like me, exist in time, I expect that your subjectivity will shift and expand with its passage as mine does. To accommodate this perpetual motion, you too will need to continually make adjustments to the document if we are to remain thorough and precise. It will not be difficult. I believe that by collaborating in this manner we will succeed in creating a thoroughly rigorous work of art thoroughly devoid of ambiguity. And surely

with the inclusion of your subjectivity the piece will begin to yield what is necessary to induce that feeling of being moved that we agree has been absent."

Our subjective participant is far less convinced of things, and he expresses his apprehension as follows: "Thanks for the invitation, but I believe you are still missing my point. I am but one tiny subjectivity in a vast ocean of other subjectivities (somewhere around 6.5 billion at present), all of whom must be considered potential participants in your piece if it is to function as art. Since you insist on being absolutely precise and thoroughly rigorous, you will have to include the particular meaning-configurations of each of these other subjectivities, and not only at one chosen moment in time, but continuously, as they, too, mutate and evolve in time—all of this, from right now until the moment you designate for your piece to expire! This would be an immense undertaking, but I suppose you will argue that since the number of subjectivities in the world is at any given moment finite what I am suggesting lies within the realm of possibility. The real issue, however, is this: even if it were possible to incorporate the unique, perpetually shifting meaning-configuration of each and every subjectivity in the world into your piece, thereby enabling it to maintain the qualities of true rigor and precision, this would do nothing to help your main problem, which is the absence of that force by which art moves people. In fact, I would even argue that the degree of diminution of this force stands in direct proportion to the degree of precision in your piece. That is to say, the more sharply you define your meaning, the more dull your piece becomes with respect to this quality or force. I cannot say exactly why this is, but one thing is clear: 'being moved' by something requires some kind of space through which my mind can move, and with everything cut up into such minute and sharply defined parts—whether the cuts are yours or my own—this movement is impossible."

Our artist thinks for a long time about what has been said, and, feeling heavily defeated, finally replies: "You know, I began this experiment with very sound intentions, namely, to eliminate all vagueness, fuzziness, uncertainty, indeterminacy—in short, all that might be construed as 'muddle-headed'—from the language of art. At this point it is clear, however, that the more precise my work becomes, the less effective it is as art—on all counts! It is beginning to remind me of the proverbial map that is just as large and detailed as the territory it represents! What you propose about including all 6.5 billion subjectivities in the piece is preposterous—in fact, it is positively muddle-headed. There must be a better way to compress all this meaning into a single embodiment in space and time—not carelessly, or with an attitude of reckless indifference, but in a carefully crafted, artful manner that will imply the full multitude without having to spell it out. Now that I think about it, is not *that* the very definition of rigor in art?" With that, our artist declares his experiment a failure and returns to his old work with a renewed sense of faith in its efficacy.

III

Absurdities notwithstanding, the thought experiment reveals several interesting things about the way in which meaning is generated in art and about the role of ambiguity in this process. First and foremost among these is the basic schema it gives us of what might be considered art's network of meaning. In the center of this network stand three macro nodes, which represent the three basic components of any work of art: the artist⁸, the work, and the percipient (i.e., the subject who perceives and engages the work). Within each of these nodes is a dense web of ever-shifting meanings,⁹ the greater proportion of which are unspecifiable (because unconscious, unknown, or unknowable) at any given moment. Meaning is generated when the three macro nodes, each comprising its own intricate pattern of micro nodes and connections, come into contact in an encounter. With each individual encounter with the work, whether for the artist himself or for another subject, a unique configuration is formed by the overall network, thus changing the meaning of the work. It is therefore impossible to declare with any decisive finality what *the* meaning of any work is. Indeed, if "the" meaning is constantly in flux and is dependent for its shape at any given instant on a vast array of shifting variables, the very notion of a fixed meaning that can be precisely defined—or discovered by careful dissection—becomes absurd. Far from being a static quality amenable to precise definition, meaning in art forms a dynamic system.

To say that a system is dynamic rather than static is also to say that the system is ambiguous. Once it is understood that art's network of meaning forms a system that is itself ambiguous, it becomes clearer why art should prefer to use a language that is ambiguous rather than one that is precise. It is essentially a matter of systemic integrity; for the sake of internal cohesion, a system will naturally have constituents with the same "shape" as the larger whole in which they are participating. The awkwardness and absurdity that ensued in the thought experiment with the attempted removal of ambiguity from one part of the system were largely the result of having destroyed this systemic integrity. The imposition of precision and fixity on a process that is both born of flux and dependent on it for its perpetuation was, in effect, like forcing a rigid rod through the spokes of a moving bicycle wheel; ossified, the experimental piece ceased to function as art and became instead a perverse exercise in futility, much like trying to square the circle.

Another relevant issue brought to light by the thought experiment involves the more specific role of ambiguity in the artist's handling of his intended meanings. In the course of the experiment it became clear that these meanings proved far more extensive (and indeed ever-extending) than he had initially thought. In order to be thoroughly precise, it would have been necessary for him to continually modify and further elaborate on his meanings *ad infinitum*, a prospect which, even if theoretically possible, would strike

anyone as grossly inelegant and unwieldy. Clearly some strategy of compression was needed. It seems we can confidently infer that this function is part of the role of ambiguity: to enfold or condense as much meaning as possible into the smallest amount of information. When meaning is compressed through the medium of ambiguity, the effect far exceeds the requirements of mere efficiency, however; the vessel into which it has been packed becomes, as Ezra Pound has said of great literature, "charged with meaning to the utmost possible degree"¹⁰—it becomes *alive, active, explosive*. Our artist's attempt to enumerate his meanings, to make them explicit and precise, had exactly the opposite effect; the more exacting he became, the weaker, more attenuated, and flat grew the impact of his meanings.

In addition to effecting this insipidness, the explicit enumeration, *ad nauseum*, of every conceivable aspect of the artist's meanings had the somewhat paradoxical effect of rendering them impenetrable from the outside. This curious outcome has its roots in one of the fundamental differences between works of logic and works of art. In a work of logic—say, a mathematical theorem—a missing piece signifies a gaping hole in the work, an absence which renders the work incomplete and therefore unintelligible. In a work of art, by contrast, a missing piece signifies a portal through which an outsider can enter the work and set the system of meaning in motion. The role of the outsider, then, differs radically in the two cases; while he is indispensable to a work of art (since he forms an integral part of its system of meaning), he is quite irrelevant to a mathematical theorem, which will remain complete, incomplete, trivial, profound, or anything else entirely without regard to him. Failing to recognize this crucial difference from the outset, the artist in the thought experiment continued to compound his problem as more and more information was added to his piece. In spite of his intention to incorporate the subjectivities of outsiders (at first one, then many, and finally all) into his piece, the piece itself forbade it.

A final issue brought to light by the thought experiment is perhaps the most significant, and that is the issue of that unnamed but distinct feeling of "being moved" that was absent throughout. It will no doubt have been guessed that this, too, is a function of ambiguity; the question is how, or in what way, does ambiguity give rise to this feeling? For among all the points that were cast into high relief by the thought experiment, this one is surely the most obscure.

But before venturing into its relation to ambiguity, it is first necessary to more fully explore the feeling itself to which we have been referring. When one encounters a work of art, one brings to it his whole being, which includes all his knowledge (conscious and otherwise), his worldview, all his experience (i.e., the entirety of his memory), his temperament, his emotional constitution—in short, the whole of his existence. Although the potential for it exists with every encounter, not every work of art will actually engage or

activate one's whole being; in fact, the large majority of encounters will be only partial encounters (i.e., they will involve the activation of only a part of one's being, leaving the others untouched). There are, then, varying degrees to which one can be affected by a work in any given encounter. At the lowest level of engagement—what we might call "appreciation"—the work's existence is affirmed and its merits acknowledged, but the enjoyment of the work remains limited to the relatively superficial level of thought. Opposite this on the spectrum of engagement is the level where one is affected to the greatest degree, and it is here that one experiences the feeling of "being moved."

In this experience—the "full encounter"—all aspects of one's being are activated simultaneously, resulting in the distinct sensation of being stirred from deep within. The language we use to describe this sensation is revealing, for the words—being *moved*, being *stirred*—are action words which indicate a process or some kind of motion. For essentially the experience is one of deep inner rotation, of moving away from one position or orientation and toward another. Although neuroscience may be able to isolate the physical component involved in this and other such cognitive shifts (i.e., a discernible shift in electro-chemical activity from one part of the brain to another), what is meant here is not so much physical as metaphysical. Whatever the physical correlate in the brain might indeed be, the change to which we are referring is one of *mind*, and it occurs on the most fundamental level of consciousness where things are conceived and unconsciously given shape, thus forming a metaphysical lens or worldview through which the world is made real to one's mind. The question, then, is from what orientation and toward what other does one turn in this interior shift that constitutes the experience of being moved in a full encounter with a work of art?

Earlier on it was noted that the cultural and historical situation in which we find ourselves is marked by a tacit conviction in the supremacy of analytic knowing, which has been internalized due to the great success of the scientific enterprise. In noting this, it was suggested that this overvaluation of analytic knowing amounts to more than just a habit of thought or an epistemological bias—that, much more significantly, it has come to constitute the worldview through which we "see" reality. The gravity of the situation, and the reason it is being stressed so heavily here, lies in a danger intrinsic to worldviews in general: once they become deeply enough internalized, their qualities and characteristics become the qualities and characteristics of the "objective" world rather than those that define one's particular (and necessarily limited) way of thinking about it. In other words, if one is not conscious of one's worldview (which is most often the case), the external world becomes endowed, by way of mental projection, with attributes rightfully belonging only to the filter through which one is seeing it. Thus the analytic worldview, with its precision-oriented, quantifying, and part-centric approach, has gone from being a view of the world to the

world itself—a thoroughly analyzable world, as immutable as it is ancient. It has become what Lewis Mumford has aptly called a "disqualified universe."

A universe denuded of anything that cannot be quantified, measured, or parsed analytically: surely that cannot be the whole picture. For as we have seen, there are dimensions of experience for which the analytic approach is woefully unsuited. Indeed, trying to know and experience the dimension of meaning¹¹ through the prism of analysis is rather like trying to know the ocean by cutting it up and separating the parts into a vast collection of volumetric units, by which method one is sure to obtain knowledge of *something*, but just as surely it will no longer be the ocean that one knows. To know in the domain of meaning requires a more holistic or systemic approach, one which allows for things to be apprehended in their original state of unbroken wholeness. From this orientation, knowledge of isolated parts is forsaken in favor of the whole pattern, in all its dynamic complexity, which is grasped not as a sequence in linear time, but all at once, synchronically. The polar opposite of the analytic, this approach can be called, alternately, the synthetic, the integrative, the systemic, or the holistic.

In light of what has been said about worldviews, and specifically about the tenacious hold that the one in particular has on our collective mindset, it becomes conceivable that the experience of being moved by a work of art is in essence the experience of moving between these two poles of knowing—or, more precisely, of moving from the analytic to the holistic. However rarely or frequently this experience may occur within any one of us (and it seems fair to suppose that everyone has had the experience at one time or another), that it does occur, and that the shift between modes appears to be bi-directional, is suggestive of something essential to human knowing in general. If, as this thesis suggests, it is possible to move with perfect fluidity between the two opposite ways of knowing, it seems reasonable to suppose that doing so enables one to experience things with fuller dimensionality than one can gain from either side alone. Indeed, it seems that to deny or suppress either approach in favor of the other amounts to an act of self-sabotage that leaves one only partially equipped to know anything at all. The same implications hold for the larger mindset as well; why should a culture define itself in terms of one dominant approach, when doing so only imposes unnecessary constraints on the range of its intellectual power? The answer may have something to do with the fact that two ways of knowing are generally seen not as mutually beneficial but as antagonistic forces,¹² each claiming superior—and often exclusive—access to truth.¹³

Rather than as mutually exclusive and antagonistic forces, it might be far more fruitful to conceptualize these opposite approaches to knowing as complementary aspects of the mind (or of consciousness). It has long been recognized by cultures all over the world that consciousness seems to have a two-fold nature.

The two modes have been variously described, the oldest dichotomy being that of yin/yang from the Chinese tradition of the I-Ching. In this formulation, the yang represents the active, masculine side of the mind and the yin the receptive, feminine side. A host of more recent formulations made by investigators from a variety of different fields serve as strong evidence for the universality of this conception. The anthropologist Dorothy Lee, for example, gave the terms lineal and nonlineal to the dichotomy, where lineal refers to rational, linear mode and nonlineal to the more intuitive.¹⁴ Other formulations include the neuropsychologist A.R. Luria's sequential/simultaneous,¹⁵ the chemist and philosopher Michael Polanyi's explicit/tacit,¹⁶ and the neuroscientist Joseph Bogen's propositional/appositional.¹⁷ While the left brain/right brain dichotomy is a familiar one (the basic premise being that the left brain is responsible for intellectual activities such as language and computation, while the right specializes in intuition and creativity), the emphasis of most of the recent formulations lies squarely on the fundamental unity (and inseparability) of the system, which is defined by the cooperative dynamics between the two polarities rather than the perpetual dominance of either one over the other.

Philosophy has given to this conception of two-fold oneness the term dual-aspect monism to set it apart from the more conventional notions of duality, which do not tend to recognize the basic identity of the opposites. Curiously, this model has also made an appearance in the field of physics; in a radical departure from "old-paradigm" science, Niels Bohr proposed, in 1928, a new principle to account for some of the strange findings that were beginning to emerge in the study of sub-atomic phenomena. His Principle of Complementarity holds that in the realm of the sub-atomic, phenomena have both wave-like and particle-like properties, both of which must be taken into consideration for a full description of any phenomenon on this scale. Although, the theory holds, it is impossible to observe both wave and particle aspects at the same time, neither one alone gives the complete picture of the phenomenon in question. So convinced was he of the truth of this principle (and of the profundity of its implications) that Bohr had a personal coat of arms made which bore, beneath a yin/yang symbol, the words: "every truth is a statement whose opposite is also a truth" (written in Latin).¹⁸ The implications of this principle for new understandings of the phenomenon of consciousness are immense.

If we can re-frame the two approaches to knowing in a manner that stresses, as in the above examples, their fundamental oneness, then the relevant question becomes one of how to begin to reintegrate the two to achieve a kind of epistemic depth that neither alone can realize. Is it possible, for example, to exercise the mind's full capacity by allowing oneself to continually pivot between the two orientations without becoming rigidly attached to or preferential toward either one?

Somewhat surprisingly, an excellent example of a field whose practitioners must be exquisitely nimble in just this way is to be found in the field of pure mathematics.¹⁹ Throughout the long history of this field, it has been widely acknowledged that there are two distinct styles of doing mathematics—the logical and the intuitive—and that both are absolutely essential to doing original work. During the long and arduous process of creating a new theorem, which involves finding solutions to difficult and highly complex problems, the mathematician passes through various stages, roughly half of which involve the deliberate, conscious work of logical deduction and discursive reasoning that most people associate with mathematics.²⁰ The remaining stages are characterized by the mathematician's willed shutting down of his analytical apparatus in order to allow another facet of his mind to take over. Reports abound in the literature of mathematicians' having sudden illuminations or insights (i.e., sudden solutions to the difficult problems) during these more "passive" stages. After the solutions are "delivered" to them during these periods of unconscious work, the conscious analytical work is resumed to verify and articulate the material revealed in the illumination.

The oft-cited example of the French mathematician Henri Poincaré's famous moment of sudden insight will serve well to illustrate the point. Poincaré had been trying to solve a particularly difficult problem, which was the construction of a theorem that would reveal an entirely new and original structure in the field of mathematics.²¹ After two weeks of hard, deliberate (i.e., conscious) work in which the solution had proved maddeningly elusive, he decided to take a break and do some travelling. While travelling, he forgot altogether his mathematical work. Then, one day, while stepping onto a bus, the solution he had been seeking appeared to him in one instantaneous flash of insight. Not only was it perfectly clear to him at that moment what the solution was, but with equal clarity he was certain of its correctness, a conviction that was eventually borne out by the conscious work in which all the details of the theorem were enunciated.

For our purposes here, two things about Poincaré's famous insight are of particular interest. The first is that in the illumination, the solution came to him as a whole—i.e., not as a succession of parts revealed one by one in linear time, but as one pattern whose "shape" Poincaré was able to recognize instantaneously. Contrarily, the multitude of facets—the details or particulars—enfolded within this whole were *not* discernible during the moment of insight; amenable only to the analytic mind, these particulars would remain ambiguous until a later stage during which they would be articulated in the exacting and unambiguous language of mathematics.²²

The other point of interest here is the high degree of mental or epistemic flexibility that mathematicians (here exemplified by Poincaré) demonstrate in their working process. By allowing their minds to oscillate

as needed between the two radically different approaches to their subject, mathematicians are able to achieve a kind of knowledge that is both rigorous and profound, and as such provides us with a unique example of the potential of two-fold knowing.

Returning to the subject of that distinct feeling of being moved in the aesthetic experience, which we have linked with the shift, inwardly sensed, between the two modes of knowing, we can begin to explore in greater detail the role of ambiguity in this process. Owing both to the power that science exerts on our collective mindset and to the more mundane fact that navigating one's way through daily life generally involves the awareness of linear time (i.e., the constancy of movement from past to present to future), it is usually with the mind in the analytic mode that one arrives at art's door.²³ Even after one stops to take notice of a work of art, the residual effects of everyday concerns linger around the periphery of consciousness—there are tasks yet to be accomplished, logistical arrangements in time and space to be made—which conspire to maintain the mind's hold on its habitual mode. Thus situated, one can *think* about the work—one can make judgments, evaluate its features by way of the usual internal commentary—but only with an internal shift can one come to *dwell in it* and experience it in all its fullness. For this shift to occur, some catalytic agent must be present—something that exerts a force, whether push or pull, that effects the cessation of language and the movement of consciousness away from the constraints of linear time and into another modality.

If it is a work's ambiguity that generates the shift in consciousness so crucial to fully experiencing artistic meaning, then ambiguity can be seen as a medium of sorts through which consciousness passes and by which it is transformed. Like a beam of light, consciousness, continually on the move, bends and changes shape in accordance with the properties of that which it encounters. When ambiguity of the generative kind presents itself, a consciousness which has arrived in one condition—that of discursive reasoning and analysis—is deflected from its former path; its flow thus disrupted, it is forced to reconstitute itself. If reason and analysis form a kind of prism which bends consciousness into a mode in which things appear as separate and differentiated, then ambiguity can be seen as an inverted prism, which renders consciousness whole again by recombining and reunifying the differentiated parts. The two prisms, then—the prism proper and the inverted—function, respectively, as agents of differentiation and integration, which together form the two-fold structure of consciousness or the two modes between which it continually oscillates.

As the metaphor of the inverted prism suggests, ambiguity of the generative kind is essentially an agent of remembering (literally, the putting back together of that which has been separated) and return. Perhaps it is to this that we can attribute a curious epiphenomenon often present in the experience of profound works of

art, which is the experience of deep sadness. It is as if in the temporary re-unifying of consciousness we are reminded of a lost state of original wholeness, a primal oneness, to which we now have access only fleetingly, as visitors. By implication, we might imagine that at some point in the course of human evolution before the hypertrophy of thought and reason, consciousness had its home in this state of unbroken wholeness, where symbolism, metaphor, allegory, and myth reside. Much like visiting one's childhood home after a decades-long absence, each return to the place that is no longer home is imbued with an acute sense of loss and the awareness that one cannot ever really go home again. Surely the emotional impact of being returned, if only temporarily, to this place of origin accounts for some of the power inherent in the experience of being moved by a great work of art.

Ascending gradually from the theoretical to the actual, we are now in a position where we can begin to move toward the experience itself. In doing so, it is to be borne in mind that although there are some significant differences between the experience had by the one who creates (i.e., the artist) and that of the one who comes to the work as participant, there is nonetheless something essential which is shared by both—namely, a similar process. For in the case of the second subject (i.e., the one who comes to the work in its final state of completion), his experiencing of the work involves a process of re-creation that is fundamentally the same as the process that originally brought the work into being. It is to this process that occurs within the interior world of the one who experiences ambiguity that we now turn.

Being a process, which necessarily occurs in time, one can discern several distinct stages through which one passes in the experience of poetic ambiguity (although passage from one to the next is relatively seamless and therefore barely perceptible). The first of these stages is the entry. The experience begins when one is confronted with a semiotic arrangement—an image, a sound, a word, and/or any sequence or combination thereof—with which one is wholly unfamiliar. In all one's prior experience, one has never met this exact configuration of representations before—and, in addition to its novelty, it is so configured that its meaning is not readily deducible from the given information. Both novelty and uncertainty being capital offenses to the analytic mind, one is faced with a decision: either to turn away from the offending phenomenon (which may be achieved by literally turning away or, more subtly, by performing a mental conversion by which the phenomenon is transformed into something already known and familiar) or to "move into" its ambiguity, to acquiesce. The decision is crucial, because in exploring the unknown, nothing can be gained without a fundamental willingness to tolerate the condition of being lost, of not knowing. If one is willing, one makes what amounts to a commitment; one commits oneself to giving up one's familiar ground for the sake of some unknowable, unforeseeable gain that may (or may not) emerge

later on. The entry, then, is a wager of sorts, an act of faith with which one is flung into a state of apprehension, unrest, and groundlessness.

Following the initial entry, one finds oneself, as expected, in a period of confoundment and frustration in which the grasping intellect struggles to render the unknown known. Intolerant of insecurity by conditioning, the analytic mind gropes for familiar features to attach itself to. In its efforts to make sense of its new surroundings, the reasoning mind busies itself with drawing parallels, writing narratives, and concocting meanings in all manner of ways, based, however loosely, on the data it is receiving from the senses. Memories are summoned, and these stored images of past experience are set beside the unknown entity and checked for likenesses. Failing that, the analytic mind in its characteristic way begins to dissect the unknown entity, breaking it down conceptually into its constituent parts—ever seeking to fix the flux and gain some kind of mastery over the situation. After some time in this stage of agitated mental activity in which the offending arrangement continues to defy reasoned analysis, the analytic mind grows weary. At the moment when it finally accepts that it cannot master the situation, the threshold to the third stage is crossed.

The third stage is one of surrender: a thorough giving up and giving in by the reasoning mind to the condition of being lost. Realizing that the tools of logic and analysis are of no use in the new territory one has entered, the mind can now rid itself of their burden, and as it does so it is reinvigorated by a new sense of lightness and liberation. For although it marks in one sense a defeat, this third stage is also one of exhilaration; one has achieved the freedom to explore without the menacing need *to know*. A period of loose association and non-purposive wandering ensues, and, the pervasive sense of frustration having been lifted, one is now open to the full range of perceptions, conceptions, and emotions that the new territory might give rise to. No longer occluded by the machinations of the analytic apparatus, all one's faculties are activated, and together they work to raise the level of one's total awareness to heights unattainable by the specialized and narrowly focused activity of analysis.

The fourth and final stage in the process is entered when, after some time has elapsed in the stage of heightened awareness and aimless exploration, new meanings and insights begin to take shape within the amorphous flux of consciousness. Things that had seemed disparate and unconnected come together to form new syntheses; memories, ideas, and perceptions that had seemed mutually foreign and unrelated combine and recombine in unforeseen ways. New understandings are forged of material with which one had thought oneself to be thoroughly familiar, as are fresh perceptions of things one had until now neglected to notice. Although they may remain inarticulate, these new understandings are impervious to

doubt; they are so deeply felt, and so deeply known, that they appear to the knower not as thoughts, which are always subject to doubt, but as something more akin to a deep sensation of warmth, or an interior vibration or glow, that is both beyond judgement and inaccessible to language. With this experience, an alternate mode of knowing, by nature synthetic rather than analytic, is achieved; the inner rotation between the two poles of the mind is complete.

Thus the four stages in the experience of moving into the synthetic way of knowing, catalyzed by the force of generative ambiguity, can be formulated as: (1) Entry into the unknown; (2) Bewilderment; (3) Surrender of the analytic mind; and (4) Insight/synthetic knowledge. Moving in the opposite direction—from synthesis to analysis—involves something like the reverse of this process, beginning with a point, perhaps born of frustration, at which the mind comes to acknowledge that it must again shift its orientation, that it must reorganize itself into an order amenable to linear thought, action, or communication. Although the experiences given rise to by the shape of each mode remain fundamentally untranslatable into the other, the knowledge gained in each is thoroughly absorbed by the other, the two being but two aspects of one and the same system.

IV

Having explored some of the key issues that arise in analyzing ambiguity (an admittedly somewhat paradoxical endeavor), we arrive finally at experience itself (or, more accurately, at an account of one such experience given in the form of words and sentences). For this we turn to a scene from a film which seems to encapsulate everything that has been said here but through entirely different means—namely, through the inverted prism of ambiguity. The film is Andrei Tarkovsky's *Stalker*,²⁴ and the excerpted scene occurs toward the beginning of the film. But rather than ending with a description of the scene itself, which would require that we maintain the posture of objectivity by which we have been well served up to this point, we will instead end with an account of the scene *as experienced by an actively engaged viewer*. Thus the portrayal given below will be a highly collaborative and participatory affair, involving as it will not just the images and sounds conceived and meticulously crafted by Tarkovsky but also the entirety of a thinking and feeling viewer in whom and by whom they are recreated (and then retold).

The scene involves three characters. The first, known only as the Stalker, is a man who hires himself out to bring people into a forbidden Zone in an unnamed city somewhere in Russia. All we know about the Stalker up to this point is that he has spent some time in prison, he is married, and he has one child, who is mysteriously deformed. By way of a subtle allusion made by the Stalker's wife in the opening scene, we

suspect that the Stalker's repeated trips into the forbidden Zone are somehow responsible for the child's deformation. Just prior to our scene, the Stalker has left his embittered wife and child to make, in spite of the wife's desperate pleas, one more trip into the Zone. The second character is a writer who has hired the Stalker to bring him into the Zone. When we are first introduced to the writer, he is drunk, irascible, and full of passionate condemnation for the dullness of contemporary life. Without mystery, he insists, life has become boring, an insufferable drone entirely devoid of meaning and governed by cold, impersonal laws. The third character, who has also come to be led into the Zone, is a scientist about whom we know very little; he is quiet and reserved, with harsh but weary features.

The three men have come together at a designated meeting place to prepare for their illicit journey into the Zone. All that we know about the Zone has been gathered by inference, and it is not much. What is clear is that whatever it is, the Zone has some strange, formidable power that both lures people to it and evokes their utter terror. Apparently it is because of this strange power that it has been forbidden by the authorities and is now heavily guarded on all sides by military personnel. Whatever their reasons (each being, presumably, deeply personal), all three of our characters are willing to risk their lives to go into the Zone. From the weathered and heavily strained faces of all three, we have the sense that it is no mere curiosity that draws our characters to the Zone but some profound inner *need*.

The scene begins after the three men have made their way, having evaded heavy fire from the guards, to an abandoned warehouse which contains the small traincar that will take them into the Zone. The desolation of the warehouse and the landscape containing it are made more severe by the high contrasts of the film's exclusively black and white palette; it is a joyless place, with rotting, decrepit structures, pools of stagnant, black water all around, and detritus from a bygone time strewn about and left to the mercy of the elements. The men wade through the ankle-deep water and a heavy silence to get to the traincar. They board, and slowly the train begins to creak down the tracks, leading out of the warehouse and into the littered landscape.

The silence is now punctuated by the rhythmic clanging of the old traincar's rusty wheels churning against the tracks. The effect is mildly hypnotic; in spite of much apprehension, we are soothed by the regularity of the percussive sounds, comforted in the realization of each cluster as it succeeds the one before with clockwork precision. We know not where we are going—into exactly *what* we are moving—but with the landscape blurring by in the background and our movement through it marked by the rhythmic clanging, it feels good to be moving. The things we pass are all as decrepit and forlorn as the warehouse that set us on our journey: abandoned houses, rusting and half-eviscerated cars, toppled stacks of poles and beams whose

usefulness has long since expired, decaying fences now almost entirely reclaimed by the overgrowth surrounding them—all saturated with high contrasts and totally devoid of color. The three men ride in silence, their faces fixed on the landscape they are leaving, their hollow eyes suggesting they are deep in thought.

As we move through the blurry landscape, we notice that the rhythmic clanging has changed; slowly and imperceptibly, it has become more complex, more musical. The percussion is now accompanied by a faint melody which seems to be morphing ever so slowly into yet something else. We notice this as we gaze for prolonged periods of time at one man's face and then another, then at the back of one man's head, then at his profile, as they continue to stare in silence. *Why are they going into the Zone? What do they expect to find there? What is the Zone? What devastating event could have occurred here in this unnamed place to cause such desolation and despair? What is the common yearning that unites this ex-convict with this tempestuous writer and this sober scientist?* There are so many unanswered questions, and as the music becomes stranger—more discordant, now tinged with electronic distortion—the questions become more urgent, more vexing.

Now the sense of order and assurance imparted by the music has entirely disappeared; the grid has dissolved, and we find ourselves entirely ungrounded in a strange, foreboding musical landscape full of jumbled and nonsensical sounds. The visual landscape, too, has become fractured by the rapid-fire succession of different angles from which we view it. Nevertheless, the train continues to move, and the men continue to stare opaquely into the distance with apparent resignation to their fate.

The scene has gone on so long, and so little has been given us in the way of explanatory information, that we realize now that whatever power we had to make sense of the things has been exhausted. Any further efforts being futile, there is nothing to do now but to let oneself be taken in by the strange sounds, the fractured images, the men's silence and their secrets.

Suddenly, all movement stops. There is total silence, and as our eyes fix on the now-still landscape we are aware only of green—a luscious, almost incandescent green issuing forth from the trees and grass with such vividness that we can almost smell it. Slowly, after recovering from the impact of the green, we look around to take in our new surroundings. The landscape is *structurally* the same as it has been—fallen utility poles spewing dead wires this way and that, scattered industrial debris of all kinds, an abandoned and rusted-out car half-sunken in the tall grass—but now, flushed with color, everything seems intensely alive, as if the landscape had just taken its first deep breath after a long illness and were now poised to exhale its

newfound vitality into our veins. A dense fog hovers just above the trees, forming a thick blanket that suffuses everything with warmth and softness. The chirping of a bird is discernible in the distance. No sensory event occurs in isolation from the others; each one seems to come as a ripple in the densely woven fabric of which we, too, are now a part. Without doubt, we know that nothing in this place, no matter how seemingly insignificant, can be without meaning, since every fiber in the field is inextricably connected to every other.

As the senses gradually become acclimated to the new environment, the awareness settles that we have ceased to be concerned with the particulars of the men's stories, that somehow it no longer matters much why they are here, or what brought them, or what they expect to find; now it is *that* they are here that matters, and that we are here with them, and for all of us there is only the thrill of exploration to be had.

The men look around in silence, as if in disbelief. Then, finally, their silence is broken; the Stalker, animated for the first time, stands up in the car, stretches his arms, and announces: "Here we are—home at last!"

Notes

¹ Bertrand Russell, "Vagueness," *Collected Papers*, vol. 9, pp. 147-154.

² In English, for example, a single word often has many different meanings, and similarly there are often many different words for the same meaning, the net result being a high degree of ambiguity inherent in the system.

³ This was not a discovery in the usual sense, since until recently nobody had ever *seen* an atom (today scientists can detect stacks and clusters of individual atoms with electron microscopes). It is important to note that when dealing with atomic and subatomic phenomena, one is generally dealing with *inferred* entities.

⁴ The parallel between science's analytic activity and that of reverse engineering can be taken one step further. The aim of reverse engineering is, in general, to be able to make a faithful copy of the original object. In some areas of frontier science (robotics and artificial intelligence are the prime examples) the artificial remaking of organic originals is exactly the objective.

⁵ Several significant challenges to the basic approach of science have presented themselves within the last century. Within quantum mechanics, for example, the shocking revelation was made that there are in fact fundamental limitations to the accuracy of measurements. It is possible that these present challenges, which remain unreconciled with the larger corpus of science, might in future centuries (or even decades) radically alter the basic assumptions, attitudes, and methodologies of the scientific enterprise.

⁶ Of course, the primary target of Freud's explanatory dismissal was the religious experience rather than the artistic, but since the two experiences have much in common, they have generally been considered together, as different manifestations of "altered states of consciousness." It is by implication, then, that Freud's theory addresses the arts. The same counter-argument to the theory could be made in defense of the obvious sophistication, profundity, etc. of the work of our great religious figures (i.e., St. Thomas Aquinas, Meister Eckhart, Martin Luther, William Law, etc.).

⁷ Within the context of these remarks, we can note with some irony Freud's undeniable fondness for poetic language, his formidable literary skill, and the wonderful imaginativeness of his thinking—all of this, in spite of his lifelong insistence on being considered exclusively a scientist.

⁸ The artist remains a central component of an artwork long after his completion of the work in the sense that he remains an implied presence. This persistent presence includes not just the meanings the artist had in mind at the time of his creation of the work but, more significantly, his entire subjectivity: all his past, the entirety of his knowledge (conscious and unconscious), his temperament, his emotional constitution, etc.

⁹ The sense in which the work itself is ever-shifting is two-fold. First, if the work's embodiment involves physical materials, these materials are subject to change (mostly decay) with time. Second, in a less literal sense, the connotations, associations, and implications generated by the materials inevitably change as cultural and historical contexts shift.

¹⁰ Quoted in Laurence Perrine, *Sound and Sense: An Introduction to Poetry*, Sixth Edition (New York: Harcourt Brace Jovanovich, 1982), 39.

¹¹ Scientists Piet Hut, Brian Goodwin, and Stuart Kauffman have gone so far as to suggest that perhaps there is a third aspect of reality (in addition to the conventional aspects of time and space), which informs all biological processes, providing them with a sense of intentionality, purpose, and meaning. The implications of this "meta-dimension", which the authors call *sense*, for the realm of human meaning seem very rich indeed. (Piet Hut, Brian Goodwin, and Stuart Kauffman, "Complexity and Functionality: A Search for the Where, the When, and the How", *Proceedings of the International Conference on Complex Systems*, Nashua, NH, 1997.)

¹² This may be a function of capitalism's apotheosis of competition as the all-pervasive force that fuels and sustains not just the economy (and therefore the very structure of society) but life itself.

¹³ The disdain of the modern western mindset for non-scientific approaches to knowledge is widely recognized, but it should be noted that the antagonism exists on the other side of the cultural divide as well. The hostility demonstrated by many devotees of holistic medicine toward anything even remotely connected with Western scientific medicine is a prime example.

¹⁴ See Dorothy Lee, *Freedom and Culture* (New York: Prentice-Hall, 1959).

¹⁵ See A.R. Luria, *Higher Cortical Functions in Man* (New York: Basic Books, 1966).

¹⁶ See Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (Chicago: University of Chicago Press, 1958).

¹⁷ See J.E. Bogen, "The Other Side of the Brain, VII: Some Educational Aspects of Hemispheric Specialization," *UCLA Educator* 17 (1975).

¹⁸ Eric LaVigne, "Creation by Numbers," *Parabola*, Volume 24, No. 3, 1999. p. 9.

¹⁹ It is surprising (and also somewhat ironic) because one of the towering figures in this field is none other than Bertrand Russell, who has here served as our representative of analysis and precision.

²⁰ These stages were formulated by Graham Wallas in his *Art of Thought* (as cited in J. Hadamard, *The Psychology of Invention in the Mathematical Field* (Princeton: Princeton University Press, 1945) as: Preparation, Incubation, Illumination, and Verification.

²¹ Technically, the theory of fuchsian groups and fuchsian functions (Hadamard).

²² It is interesting to note that for many professional mathematicians, mathematics is so much more than an exercise in intellectual rigor; at its highest level, it is more akin to art (or even religious experience) in that it gives its practitioners access to a profoundly beautiful, transcendent realm. Testimonies about the experience of this exquisite beauty by mathematicians read like the testimonies of artists or spiritual seekers trying to put into words their transformative moments of insight. (For a particularly eloquent account, the reader is referred to G.H. Hardy's book *A Mathematician's Apology*).

²³ There is also a strong argument to be made for the implication of language in the predominance of the analytic mode over the other. Since language itself is linear and sequential, and consists in the piecing together of separate units of meaning, and because we rely so heavily not just on verbal communication but

also on verbal thought in contemporary life, it is no wonder that the analytic mode has come to be the home ground of contemporary consciousness.

²⁴ Andrei Tarkovsky, *Stalker* (Mosfilm, 1979).