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# How Does the World Lend Itself to Our Knowing?

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*Following are a few of the introductory sections of the long, concluding chapter of my online book, “Evolution As It Was Meant To Be — And the Living Narratives That Tell Its Story.” The chapter is called “Some Principles of Biological Understanding,” and the book is available on The Nature Institute’s adjunctive website, [bwo.life](http://bwo.life) (also accessible as [BiologyWorthyofLife.org](http://BiologyWorthyofLife.org)). The full version of this chapter is at [bwo.life/bk/epist2.htm](http://bwo.life/bk/epist2.htm).*

**S**TAND ANYWHERE IN NATURE and observe the scene. It can be a mountain or meadow, sea or sky, lake or desert — or a city street. Then ask yourself: what would remain of the scene if you were to remove every quality from your surroundings?

To ask about qualities is not merely to inquire into our aesthetic sensibilities. Rather, it has to do with the bedrock character of the world we perceive, bearing on everything from the luxuriant Amazon rain forest to the barren surface of the moon. Wherever we are, what would exist for us if there were no qualities? Does any material *thing* in the known cosmos present itself other than through qualities?

It is not a difficult question. Would that tree be there in what we consider a *material* sense if there were no color of the leaves, no felt hardness of the trunk, no color and texture of the bark, no whispering of the breeze among the leaves, no smell of sap, wood, or flower, no possibility of song from birds flitting among the branches? Do we see, hear, touch, smell, or otherwise sense anything in the world apart from its qualities? Could we speak of a thing’s form, substance, or even its existence if it did not present a qualitative, sense-perceptible face to us?

The hardest part of all this talk about qualities for most people lies in their feeling that the solid external reality of things is being denied. But to point to the qualitative nature of the sensed world is not to question its reality, or its solidity, or its otherness. It is merely to acknowledge that real solidity — the only solidity we are given in experience and can collectively verify as an objective aspect of reality — is *felt solidity*. The sensed hardness of things is no less a perceptible quality than the taste, color, or sound of things.

What tends to be missed here is that the qualities of nature are not the private individual’s subjective contribution, but rather belong to the world’s objective reality that we collectively share. We do not need to invent an additional reality — minuscule bits of mindless stuff somehow *behind* what

we experience — in order to account for the trans-individual objectivity (otherness) of the world’s expressive qualities. We will gain a fuller perspective upon this as we move along<sup>1</sup>

To say that the world we know is qualitative is not to doubt its substantial reality. It is only to say that this reality is irreducibly qualitative. Qualities are not features that exist only “in our heads.” So we come back to the perfectly straightforward question: “Does anything exist materially, available to an empirical (experience-based) science, except as a presentation of qualities?” Would we have quantities to play with if there were no qualities from which to abstract them? And would we know what our mathematical formulae were about — what they meant — if we could not restore to our thinking the qualitative contexts from which they were abstracted? It is hard to believe that numbers alone can give us a world.

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*Does any material THING in the known cosmos present itself other than through qualities?*

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I think the conclusion you will come to is inescapable: whatever knowledge of the world we manage to gain is rooted in qualitative appearances, and the world would lose its reality for us — it would no longer be there for scientific investigation — were its qualities to vanish.

Given the more or less determined, yet never fulfilled resolve among scientists from Galileo onward to have a science without qualities, it would seem that the integrity of science as a respectable knowledge enterprise rather than an empty pretense hangs on our answer to the question, “Would anything be left to investigate if we were true to our ideals and really did remove qualities from our science?”

Because the answer is that nothing would be left, we never do in fact succeed in having a science without qualities. In “All Science Must Be Rooted in Experience” (Talbot

2020) I pointed out how nonsensical, if not also humorous, are the ways in which otherwise serious thinkers end up falsely projecting qualities into their non-perceived, purely theoretical constructs — all so that they can seem to have something, rather than nothing, to talk about.

## We Know the World through Thinking as Well as Sensing

There are two primary portals for our experiential knowledge of the world: first our senses, and then the thinking that conceptually orders the diverse contents of the senses, bringing them to meaningful and coherent appearance. If we could not perceive qualities through our senses, as I suggested in the previous section, we would not have a world. But it is equally true that without a conceptual ordering of what we receive through the senses, we again would have no world.

If we are truly to recognize something — a *this* as opposed to a *that* — we must be able to form *some* conception of what we are beholding. Which is to say: we must grasp the ideas that inform and are inherent in what we are beholding. The phenomenon can present itself to us as a given reality only so far as its real and inherent thought-content becomes at the same time *our* thought-content. To see a soaring hawk while having no idea of organism, bird, wing, flight, raptor, predation, air, gravity, matter (or material thing), and so on, would not be able to *see a hawk*.

The appropriate concepts are our power of recognition and explanation, and without them we have no such power. This is true whether we are apprehending ideal (idea-like) laws governing material interactions, or the ideal coherence of a single leaf or grain of sand.

We would not recognize a tree if, in looking up toward a cluster of green leaves, we had no ideas to tell us that the relation of the leaves to branch, trunk, and roots is very different from their relation to the visually adjacent patch of sky-blue color. We could in general recognize nothing of the tree at all if we had no idea of the thought-relations constituting a tree.

To stare in absolute, thought-less incomprehension at the scene around us would be to stare at a meaningless blur — or not even that, since, in our thoughtlessness, we would not even have the concept of a “blur.” Things come to meaningful appearance only by virtue of their distinct and interwoven meanings; we recognize them by means of the ideas lending them specific form and significance, through which we can identify them as being the kind of things they are. (“Oh, *that’s* what I’m seeing!”)

In only slightly different words: we could have no idea of things that, in their own nature, were entirely non-ideational. “A reality completely independent of the mind which conceives it, sees or feels it,” wrote the French mathematician

and physicist Henri Poincaré, “is an impossibility” (Poincaré 1913, Introduction). And the traditionalist thinker, René Guénon, distilled the matter to its essence when he wrote: “If the idea, to the extent that it is true and adequate, shares in the nature of the thing, it is because, conversely, the thing itself also shares in the nature of the idea” (quoted in Burckhardt 1987, p. 14n).

The main point here — that ideas belong to the innermost nature of the world — seems extraordinarily difficult for us moderns to take hold of. Perhaps we await only an emphatic snap of the fingers to awaken us from our trance and enable us to see what is painfully obvious: if we, with our human thinking, can *make sense of the world*, it can only be because the world itself is in the business of *making sense*. Ask yourself: how could it be otherwise? And yet the fact that thoughts are not merely the private property of individuals, but also come to manifestation within the world around us, is virtually unapproachable for most of us today.<sup>2</sup>

I don’t suppose there could be a more startling disconnect than when knowledge seekers aim to *articulate a conceptual understanding of a world they consider inherently meaningless*. A conceptual articulation, after all, is nothing other than the working out of a pattern of interwoven meanings. A truly meaningless world would offer no purchase for this effort.

My repetitive efforts to get this point across have been intentional because the truth so easily escapes us. Let this be the sum of the matter:

*Anything whose objective and true nature we can apprehend only through revealing description, including scientific description, can hardly be said to possess a nature independent of mind, thought, language, or meaning.*

Two other notes. First, we commonly assume that our perception gives us “things” directly and mindlessly, about which we then think and form theories. But a truth widely recognized by those who study cognition is that we do not even have “things” except through an activity of thinking — not necessarily a conscious thinking, but rather a thinking that, ever since childhood, has increasingly informed our senses. This thinking often shapes what we perceive without our being aware of the role of thought.

But, with proper attention, it is rather easy to catch this thoughtful, formative activity of perception “in the act” so as to become aware of it.<sup>3</sup>

Finally, whatever the processes of human cognition, we should not think that the world itself has distinct “parts,” the sensible and the thoughtful. We can no more imagine something sensible without thought than we can imagine substance without form. We can, of course, distinguish between the two aspects. But as soon as we ask “what it is” that meets our senses quite apart from its thoughtful coherence, we

have a problem. To say anything at all about what it is would be to characterize it with thought, so we would no longer be talking about a sensible content apart from thought.

I don't think there is any way around this, nor need there be. The world is a unity. It resists every rigid dualism. But surely we can say — as a matter of distinction rather than pulling apart — that whatever meets our senses must be inherently bound up with thinking, much as substance is inherently bound up with form.

## Is the World a Dualism of Appearance and Reality?

We have seen that the only world we could ever know is known interiorly, through sense perception and thinking. It is a “marriage of sense and thought” (Edelglass et al. 1997). Of course, our knowing of the world requires other interior capacities as well, such as those of imagination and will. But the main point at the moment is the rather obvious one that all our knowing calls upon interior capacities — powers of inner activity that presuppose consciousness<sup>4</sup>

Since both our perceiving and thinking are functions of consciousness, the manifest world is a world consciously experienced. And since we all share the practical, day-to-day conviction that the world of our conscious experience is, in a direct and unmediated sense, the real world — a world with which we routinely, fully, materially, and consequentially engage in the immediate terms of our experience — the most straightforward and consistent conclusion is that the world itself, *in its own nature*, is phenomenal. It is a world whose true substance lies in its power of *appearing* — that is, in its having the character of a content of experience. Qualitative and thought-full, it comes to its own characteristic expression — achieves phenomenal reality, or existence — only within what we might call the *interior dimension*.

But this straightforward conclusion collides with a centuries-long mental habit that tells us we look out upon a world of mindless objects utterly independent of, and unlike, our cognizing selves — objects wholly alien to our own inner being. In fact, these objects are imagined to be so alien that our perception of them cannot be trusted. Who has not heard the subjectivity of human perception contrasted with the solid reality of mindless physical objects?

The common suggestion, then, is that we have two different worlds: the *subjective* world of appearances — appearances not only mediated by, but also unknowably transformed by, our nervous systems — and a world of *real things* somehow hidden behind the terms of our experience. This gives us a secondary dualism — one of appearance and reality — descended from the primary “Cartesian dualism” of mind and matter.<sup>5</sup> From this point of view,

untrustworthy appearances are all we have, at least in any direct sense. Objective reality, on the other hand, is — well, it is presumably out there *somewhere*.

## Our Cognition Places Us in the World, Not a Mere Representation of It

One rather sticky problem with the appearance/reality dualism is that this would seem to make reality unavailable to an experience-based (empirical) science. But a more immediate issue is that the supposed second reality hidden behind the appearances contradicts our natural, seemingly irrepressible, and well-supported conviction that we directly experience the real world.

Regarding this last point: nothing in our perception hints at the existence of a second world — a *real* world contrasting with appearances. A perceived tree appears *itself to be* the tree. So also the stream I sometimes sit alongside. If I pick up a small stone and toss it into the water, I perceive both the object and my own arm in picking up the stone and throwing it, and I likewise perceive the trajectory of the stone in relation to earthly gravity, the wind, and the energy at work in my muscles. I can be sure that, exactly as observed — and exactly where observed — the stone and all the other elements of the scene, from my arm to the water, are fully “respecting” the laws of nature. That is, these elements are lawful *in their own immediate, experiential terms* — without my needing to refer to some hidden, non-qualitative, non-experienceable reality behind the appearances<sup>6</sup>

So the world I perceive shows no sign of actually being inside my head either literally, or as a reduced representation, or as an illusion, nor any sign of somehow referring to an unknown substratum lying behind the appearances. Rather, perceived objects testify with overwhelming force to their occurrence, *in their full-bodied presence and reality*, right where and as they are given in qualitative, thought-full experience. In other words, when you and I try to picture the “interior” space of our consciousness, we must imagine a space substantially (but not wholly) shared with others; and within this shared space of consciousness we find the reality of the material world.

We can put this in either of two complementary ways. We can say, in the first place, that our experience of the world occurs not merely “in here,” in some purely private space, but rather occurs in the world itself. Or we can say: the world itself naturally occurs within the *interior dimension* of experience in which we all (along with other creatures) participate.

The private aspects of the experience stem in part from the fact that it comes to us via our personal sense organs, located in space and giving us, for example, a particular angle of view upon a tree. Subjective aspects may also stem

from, among other things, defects in our sense organs, such as the severe tinnitus I experience. Likewise, if I were a person who is blind or deaf or who has had traumatic encounters in nature, I would have experiences of the world differing from those I now have. Mozart would have experienced the world of sound and music to a depth I cannot imagine, just as Picasso would have experienced the world of visual form in ways incomprehensible to me. I do not have a bat's sonar-like sense, nor an insect's infrared sense. The world lends its potentials of experience to all creatures according to their capacity. But we all find ourselves living side-by-side in *one world* — a consistent and shared world with diverse yet harmonious potentials of experience.

This interior character of the world would make no sense — would find no realization — in a universe that was not fundamentally a universe of beings rather than things (which is, of course, the way the universe has been understood throughout almost all of history). Not many are interested in at least inquiring whether there might be something pathological in our strong inclination today to imagine a world of things rather than beings.

The subjective aspects of our experience do not bring into question the objective character of the world we share with others. The English philologist and philosopher, Owen Barfield, has put it this way:

I am hit violently on the head and, in the same moment, perceive a bright light to be there. Later on I reflect that the light was “not really there.” Even if I had lived all my life on a desert island where there was no-one to compare notes with, I might do as much. No doubt I should learn by experience to distinguish the first kind of light from the more practicable light of day or the thunderbolt and should soon give up hitting myself on the head at sunset when I needed light to go on working by (Barfield 1965, pp. 19-20).

We have no ability even to conceive how an objective thing might exist outside the possibilities of experience. To conceive its supposedly alien character in order to announce our belief in it would be to realize it in the only place it could be realized — within consciousness. So it wouldn't be alien after all.

I have already mentioned that, in the daily routine of our lives, we are all convinced that our experience as knowers presents us with the actual contents of the real world. We are given *within consciousness* things we know at the same time to be objectively *out there*. But we do not succeed very well, intellectually, in holding on to this double aspect of our experience. The effort to do so, therefore, can be an excellent exercise. We can try to grasp simultaneously both of the following truths, each of which by itself seems a self-evident

aspect of our experience, whereas the two conjoined do violence to our most entrenched habits of thought. Looking out upon a natural scene (preferably one with movement, as of clouds or a stream or wind-blown trees), we can think:

- *This presentation of nature, with its objective and collectively verifiable aspects, is itself the real material world in which I and others live, write poetry, and do scientific experiments.*

But also:

- *This presentation of nature is occurring within my consciousness.*

The ultimate demonstration of the compatibility of these two truths is up to those individuals who actually make them a matter of experience. The exercise is best done briefly and repeatedly, but with thoughtful concentration, over a long period. But be assured: at the point where you have deeply taken in both truths and have been able to hold them together in harmony, you will have overcome much of the pathology in modern human experience.

All this is extraordinarily important. But it is also extraordinarily difficult for contemporary minds to accept. Nevertheless, allow me to state the matter once more: the “view” of the world we are given through our thought-informed senses is not just a view, or representation, of the world. It actually *is* the world — the world in which we are present and from which our own bodies are made. Or perhaps it would be even better to say (with a view toward the following section): it is our direct participation in the creative activity giving rise to a world possessing the character of contents of experience — a world that is from the beginning an expression of interior activity and that can be creatively participated in by means of our own interior, expressive activity.

## We Cognize the World by Participating in Its Creation

There can be no overstating how dramatic and unexpected is the view set forth above. It is one thing to imagine that our eyes are little camera-like devices producing an image that someone, somewhere, somehow, manages to view and interpret as a representation of a mind-independent world. But it is quite another to recognize that, through our eyes and other senses together with our thinking, the world itself takes up its existence in the only place it can — *within living experience*.

During the first third of the nineteenth century Samuel Taylor Coleridge had to have come to terms with the difference between reality and a representation of it when he suggested that our power of perceiving and knowing the natural world is a repetition in our own minds of the very

same creative activity through which the world came to exist and is sustained.<sup>7</sup>

In other words, so far as we truly and imaginatively perceive the world, we do not merely encounter it from outside. With our cognitional faculties, we stand within it, as in some sense our own creation. After all — as I have been suggesting above — it is not that we “snap a picture” of an independently existing world. We have the very world itself through our cognitional activity. This suggests that, through the creative aspect of our perception, we may “do our own bit” in shaping the world’s coming to reality, just as each of us plays his own role in making human society what it is. On this, see “The Evolution of Consciousness” (Talbot 2022).

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How much we have had to pay for the anemic belief that our senses give us mere picture-like representations of an alien world! But everything changes when we realize that, just as a boulder on a mountainside is fully and seamlessly embedded in the surrounding world of wind, water, light, and gravity, so, too, our own cognition and expressive powers embed us as knowing participants within a reality of universal expressiveness, and do not confront us with a mere representation of it.

We can notice in general that everything we make into a content of our own experience requires a re-enacting of something like the interior activity that first produced that content. This re-enacting is, for example, the way one human being experiences the content of another’s mind. If we attend a lecture (and are paying attention), we follow along by bringing the speaker’s thought-content alive as the content of our own minds. So far as we do this faithfully, we live within the same thought-world as the speaker, not a copy of it.<sup>8</sup>

But something like this must also be true of the qualities and thought that constitute the interior dimension of the world as a whole. Here, too, our possibility of seeing and understanding depends on our ability to re-enliven the one world’s interior by participating directly in it through the activity of our own interior — in particular, our sensing and thinking.

Coleridge’s remark can help us keep in mind just how radical all this is. If we, in bringing the contents of the world alive within our own experience, must participate in the creative activity through which these contents are originated and sustained, and if this means not creating some kind of private copy, but rather being active in the one world’s original and ever-evolving manifestation of itself — well, then, this places us in a position of high responsibility indeed.

## NOTES

1. For the moment I will add this: There are two possibilities. We *could* simply stay with experience. That is, we could be content to say that what the world gives us in the wood of a tree trunk is, among all its other qualities, a sense of pressure or felt solidity. If we are of a certain inclination, we might imagine the pressure or “force” involved as being an activity of will associated with whatever creative power of becoming constitutes the world’s material substance. Since “force” has long been a troublesome concept in physics — and given that the material world is of such a nature that it presents itself to us “interiorly,” through qualities — it seems reasonable to investigate whether forces can best be thought of as another sort of interior expression.

But the second possibility is the nearly universal one: we gratuitously invent an addition to our actual experience. We want *something there* to buttress the world given in experience — something mindless and utterly unlike mind, with its qualitative experience. But, of course, we also want it to be “hard bits of stuff” ... like what? Well, of course, like the only hardness we ever know or could know, such as that of the solid trunk of the tree presented in experience. And so we invent the notional realm of “particles,” assumed to be like tiny bits of the actual, felt world, while at the same time being conceived as non-qualitative and completely unlike the actual, felt world. And the world itself (about which we are correspondingly ambiguous, sometimes referring to the felt or sensible world, and at other times referring to a second world hidden behind the sensible one) is supposed to be “built up” from these self-conflicted bits.

A tall order. Physicists, depending on the conversational context, know well enough to disown these notional particles. Biologists, it seems, haven’t gotten there yet. And so they project their “particles” (modeled after our sensible experience of solid matter yet assumed to be mind-independent) into a realm where we can have no sensible experience. This reinforces their conviction that organisms are, at bottom, beings altogether without interiors.

We certainly can, for example, use an atomic force microscope to measure forces far beneath our powers of sight. But what is the machine doing, if not giving us an extraordinarily tiny measure of the resistance we feel when we press our hand against the tree trunk?

Forces, although they can have centers of activity, are certainly not particles, as we commonly imagine particles.

2. The philologist and historian of consciousness, Owen Barfield, in the second lecture of his little book, *Speaker’s Meaning*, pointed out that, up until the Scientific Revolution, the conviction that ideas were the private property of individuals would have been fully as unapproachable as would be the conviction, for us, that ideas belong to the objective world. The “common sense” of every age can be remarkably difficult to come to terms with, or even to recognize as such. So we tend to be trapped within our own cultural era. The best escape from the trap is to become literate about how earlier eras differed from our own. And that literacy is not achieved merely

by spinning childish tales about our own triumphs over the universal ignorance of our forebears (Talbot 2022, “The Evolution of Consciousness”).

3. See in particular the section, “How do things around us become what they are?” in “All Science Must Be Rooted in Experience” (Talbot 2020). If anyone should remain skeptical of this, I would strongly suggest reading Chapter 4 (“Intentionality”) by philosopher Ronald Brady in the online, freely accessible book, *Being on Earth: Practice in Tending the Appearances* (Maier et al. 2006).

4. With respect to humans: by “consciousness” I include everything on the spectrum running from the unconscious to those contents of which we are most fully aware. What unites everything along this spectrum is its potential for being an interior content we are aware of. Which is to say rather paradoxically that the unconscious shares in the nature of consciousness. We do in fact find ourselves often raising to consciousness interior contents that *had been* unconscious.

5. During the first half of the 1600s, the French philosopher René Descartes distinguished between “extended stuff” and “thinking stuff” — and did so as if they were separable and disconnected substances having little or nothing in common. This is said to be the source of the “dualism” that so many today, for good reason, would like to disown. Having echoed down through the last several centuries, dualistic thinking has crystallized especially in what we think of as the mind/body problem and, more generally, the mental/physical dichotomy.

Nearly all scientists today disavow “Cartesian dualism,” yet nearly all live intellectually by means of it. There is a very real sense in which Descartes’ cleaving stroke through the heart of reality has been almost universally accepted — perhaps most of all among materialist-minded biologists. That is, they seem to have felt they must accept the stroke as a kind of *fait accompli* and then try to live with the violence thereby done to the unity and harmony of the world. They merely choose: which half of this improbably fractured whole shall they accept and which half reject? And so the “material” they embrace is dualistic material, bequeathed to them by the Cartesian sundering of mind from matter. Likewise, the mind they reject is dualistic mind.

Materialists they may be, but their materialism is defined by the dualism that has been drilled into our habits of thought and perception. Instead of going back and searching for a different, non-dualistic way forward, they have accepted the original, dualistic fractionation of a living, unified reality, and been content merely to carry a torch for just one of its mutually estranged aspects.

A way forward has already been indicated in the foregoing. Instead of a dualism of mind and matter, we could acknowledge the actual process of our knowing, with its intimate marriage of thought and sense. Our own experience presents us with nothing incompatible or problematic about this marriage. The only problem is that we have been trained by our dualistic habits to think of material substance as inert, mindlessly solid “stuff” whose inherent, well-formed powers of lawful (ideal) interaction can be conveniently ignored whenever we are considering the nature of material reality.

But, contrary to this prejudice, we find it impossible even to conceive a substance, or interaction of substances, that is not already an expression of meaningful form. This is the point made in the previous sections — that we perceive nothing without the aid of form-giving thought. We should ask ourselves: “Where do we ever encounter substance that is not a manifestation of specific, intelligible form?”

The obstacle for our understanding of all this lies in the unconsidered *presupposition* that the problem of knowing is the problem of how our “minds in here” can apprehend “mindless substance out there.” But this is a dualistic assumption made *before* one looks at the actual process of knowing. The dualistic stance is imposed on the analysis in advance, defining the entire shape of the philosophical problem.

The philosopher Ronald Brady, in a posthumous treatise titled “How We Make Sense of the World” (Brady 2016), succinctly summarized the issue this way:

- “If the question is: ‘how can we know the world?’ or ‘how does the act of cognition take place?’ we cannot begin with the very ‘knowledge’ that this investigation should justify, or we investigate no more than the logical implications of our presuppositions. Epistemology ... cannot begin from any positive knowledge of the world, but must suspend all such ‘knowing’ in order to examine the act of knowing itself ... if we do begin from such ‘knowledge’ our epistemology will necessarily validate present sciences, and deny the possibility of any other form of science.”
- “Most modern approaches, for example, take their starting point from the apparent distinction between the thinking subject and the world external to that subject, and thus formulate epistemology after a Cartesian or Neo-Kantian framework. In this formulation ... the basic question of epistemology becomes: ‘what is the relation of thinking to being?’ or ‘what is the relation of subjective consciousness to external or objective reality?’ These questions arise from the assumed separation of the two — that is, thinking attempts to know the world of objective reality, which world is itself totally independent of thinking. In such a formulation, however, we [assume that we] already know something of that world (such as its difference from thinking), and the problem is created by what we know — that is, the distance between the thinking and its object.”
- “Since we cannot take the results of previous cognition for granted when we attempt to grasp cognition itself, another formulation of the problem is necessary. If we simply propose that knowledge is immanent in human consciousness (if it is not, then we are not speaking about anything), the basic question of epistemology could be simply: How? What is the act of knowing? Thus we face toward our own act of cognition, and the investigation turns on the *self-observation of thinking*.”

6. We are free to theorize in terms of non-experienceable constructs. But we typically do so by at least implicitly making

models out of them, *as if* they were experienceable things (such as the “particles” of particle physics). And such models — because they are based on non-experienced constructs abstracted from appearances and falsely conceived as if they were themselves actual appearances (phenomena) — always turn out in one way or another to be false to reality (Talbot 2020, “All Science Must Be Rooted in Experience”). They also vex us to no end, as in quantum physics.

There is no reason we should not investigate the appearances in all directions available to us, without limit. We can, for example, use instruments to explore the structure of forces at a level beneath the possibility of actual sight or touch. But the physics of the past century has taught us very well that we run into crippling trouble when we try to clothe unsensed theoretical constructs with sensible qualities, as we typically do when we talk about “particles” and then assume that these must be capable of traveling through space, like sense-perceptible things, from point A to point B. If the world is by nature an *appearing* world, then we abandon reality when we talk about non-appearing things as if they were real phenomena.

7. Coleridge wrote: “The primary Imagination I hold to be the living Power and prime Agent of all human Perception, and as a repetition in the finite mind of the eternal act of creation in the infinite I am” (Coleridge 1906, Chapter 13). Coleridge was speaking from a deep Christian faith. I do not know any grounds for disparaging his way of stating the matter, but for the sake both of simplicity and of remaining as far as possible within the terms of our contemporary powers of scientific observation and analysis, I have paraphrased his remark in the main text. Coleridge also wrote that

the productive power, which is in nature as nature, is essentially one (i.e. of one kind) with the intelligence, which is in the human mind above nature (Coleridge 1969, p. 497-8).

Coleridge (quite rightly!) considered this statement rather obscure. Fortunately, we can expand the remark in line with his own written annotation of it: the productive power of becoming which we discover in (or above) the finished products (phenomena) of nature is a power we can call “Nature,” or “Agency.” And this Agency above nature is akin to the intelligent Agency of the human being, which also stands above nature. And to this we might add: it is because of this kinship that our own imaginative, perceptual, knowledgeable apprehension of the phenomena (appearances) of nature reflects our nascent creative powers participating along with “the productive power of becoming which we discover in (or above) the phenomena of nature.”

8. Regarding our attention to a lecture: it is also well known that we tend to mimic the lecturer’s physical speech subliminally within our own vocal apparatus. As for copies of thoughts, it is well to realize that the conceptual elements are not material structures, and we cannot create multiple copies of them. What would be the “thing” we are copying? If we are paying attention to our own thinking and not theoretical brain states or whatever, we can hardly help realizing that, no

matter how many times we return to the same concept, we are not multiplying copies of it, and the same is true when different people take up the same concept. We may accompany a concept with varying mental imagery, but the images are no more the concept than our pictures of a straight line are the concept of a straight line. All instances of the concept, as pure concept, are the *same* instance; they are numerically one, not many. Through our thinking we share, as it were, in “one spirit.” It is a useful exercise to think of a pure concept (say, that of a straight line) while asking yourself, “How might this concept, *as a concept*, not as a mental picture, be multiplied?” It is difficult to imagine even what this might mean — or, at least, it is, so long as one stands within the actual experience of thinking, and not in some materialized image of it.

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