

Interview with an Old New Realist

*Nicholas S. Thompson and
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Editor's note: I did not want to complete this book without a contribution from the only breathing New Realist I have ever known, Prof. Nick Thompson. When I invited him to participate, I was surprised by the reply:

Dear Eric,

Thanks for your kind invitation: however, I regret that I cannot participate. All the books and papers that I would need to do the topic justice are rotting in the loft of a hay barn two thousand miles away. Moreover, I have published on these matters for nearly 40 years, but largely to no effect. I don't say this to complain, but only to justify my belief that my writing more does not make much sense. Curious readers may find the old work at <http://home.earthlink.net/~nickthompson/naturaldesigns/> and I would be happy to talk about it at nickthompson@earthlink.net.

This response was distressing. Indeed Nick has spent several years writing on related issues, but I had hoped he might pull this work together and perhaps set it within an autobiographical context. After some negotiation, we agreed that I would send him questions and that he would send me irascible answers. What follows is the result of that odd arrangement. Nick asks that you read these answers as reminiscences that are true to his memory, and hopefully also to the facts.

—Eric Charles

Consciousness

- *How is Holt's understanding of consciousness different from standard views?*

At the core of Holt's view of consciousness is his belief that our consciousness—your consciousness, my consciousness—is out there in the world. It is, in fact, a slice of the world. My consciousness is that slice of the world that is carved out by my behavior, and your consciousness is that piece of the world that is carved out by your behavior.

Holt writes:

A navigator exploring his course at night with the help of a searchlight, illuminates a considerable expanse of wave and cloud, occasionally the bow and forward mast of his ship, and the hither side of other ships and of buoys, lighthouses, and other objects that lie above the horizon. Now the sum total of all *surfaces* thus illuminated in the course, say, of an entire night is a cross section of the region in question that has rather interesting characteristics. It is defined of course, by the contours and surface composition of the region, including such changes as taking place in these (especially on the surface of the waves), and by the searchlight and its movements, and by the progress of the ship. The manifold, so defined, however, is neither ship nor searchlight, nor any part of them, but it is a portion (oddly selected) of the region through which the ship is passing. This cross-section, as a manifold, is clearly extended in space, and extended in time as well, since it extends through some watches of the night. . . . This cross-section, furthermore, is in no sense inside the searchlight, nor are the objects that make up the cross-section in any wise dependent on the searchlight for their substance or their *being*. (1916, p. 171)

- *What does that say about the privacy of consciousness?*

It says that consciousness is not private. When I watch you behaving in the world, your consciousness becomes a part of my own. Watching you respond to the world is essentially like watching you illuminate with your behavior the parts of the environment that constitute your consciousness (see also Michell, this volume). You, of course, can do the same thing: To be *self*-conscious is to watch yourself responding in the world and thereby come to know the parts of your own consciousness.

- *This position is very counterintuitive.*

Well, it's radical. It is far more radical than psychological behaviorism, which merely asserts that a private consciousness is beyond the reach of science, or philosophical behaviorism, which asserts that talk

of private consciousness is incoherent. It stands in opposition to any of the philosophies of mind that derive from Descartes's meditations (see also de Waal, this volume). In fact, it hacks at the foundation of such philosophies by challenging Descartes's idea that I can doubt anything but my own doubt. As I lie abed in the morning, before I open my eyes, do I doubt that a floor is under my bed to receive my feet as I stand up? No, I do not doubt, as we both plainly see, when I swing my feet out from under the covers and unhesitatingly put them floorward. Contra Descartes, my doubt is not the most fundamental thing that I know; on the contrary, my doubt is one of a rich set of organism-designated behavioral–environmental patterns that I (or you, for that matter) can see by watching what I do.

- *Why would you believe in such an unintuitive thing?*

Eventually, anybody who tries to maintain a theory of consciousness is doomed to say something very foolish. In the long run, believing in a public mind such as Holt proposes requires less foolishness than believing in the private mind that infects our day-to-day conversations about experience.

Becoming a New Realist

- *We'll talk more about the foolishness later, but first I am curious to know how you came by this unusual perspective. You told me that you were trained as a Tolman-style behaviorist. What does this mean? (Both, what does it mean to be a Tolman-style behaviorist, and how were you trained that way?)*

The year I left Harvard and arrived at Berkeley to do psychology was the year that Tolman died. Tolman was beloved by his faculty, not the least because of his refusal to sign the California loyalty oath, for which he was fired during the McCarthy era. Not quite sure what happened then, but by the time I got very far into the graduate program, UC Berkeley was building its new Psych-Ed building and calling it Tolman Hall. So I was taught by a faculty in mourning. The only explicitly Tolmanian message I got, however, was from my undergraduate advisor, Benbow Ritchie, who had been Tolman's student, got himself hired on the faculty, and then pursued a career as a philosophical gadfly among psychologists, a designer of crucial experiments undermining conventional interpretations of learning theory and the director of full-cast George Bernard Shaw productions in the tiny basement of his house in the Berkeley Hills. Ritchie's *bête noire* was the circularity of the law of effect—the tendency of his

colleagues to inter-define reinforcement and learning. To remedy this flaw, he insisted that before one sets about explaining anything, one has to identify clearly what is to be explained and that one's explanation cannot consist merely of a restatement of the thing to be explained. I took a couple of courses on the history of psychology and became convinced that the whole field was shot through with circularities of this sort. Meantime, I was taking graduate courses in anthropology and biology and becoming more and more committed to ethology, which seemed to be actually making discoveries about real animals in the real world, rather than about average animals in the abstracted world of the laboratory.

I got my degree in Tolman Hall and took a one-year postdoc in the Biology Department with Peter Marler, planning my escape from laboratory work on primates to fieldwork on birds (see Thompson, 1976). Shortly after I moved to Swarthmore for my first teaching job, my book-publisher father was offered a manuscript by a British lawyer critical of Darwinism for, among other things, the inter-definition of natural selection and adaptation. The author's triumphant conclusion was that biologists had failed to prove evolution beyond a reasonable doubt and had failed to notice this glaring fact because their theories were shot through with circular reasoning. I thought he misunderstood what scientific "proof" was all about, but still I recommended publication and supplied the title for the American Edition (*Darwin Retried: An Appeal to Reason*, Macbeth, 1971). Because of my history with the circularity of the law of effect, the idea that biology might also have a circularity problem gnawed at me.

I wrote a paper or two (order of events is vague) about the "tautology problem in evolutionary theory" and an unpublished paper on biological behaviorism in which I tried to separate out natural selection from adaptation. By then, I was pretty much a bird-guy, and everybody wondered why a crow-watcher was concerned with philosophy. I wasn't sure myself. Then, one day, I was straightening up the books in my office and came across a little green pamphlet that had been given out to mourners at Tolman's memorial service. A pile of these must have ended up in Ritchie's office after the memorial, and having nothing better to do with them, he used to hand them out to his advisees. In it was a bibliography of Tolman's work. Reading down through the titles, I found several that seemed to be saying what I had been trying to say in my biological behaviorism article.

- *What do you think that predisposed you to this way of thinking?*
Who knows!

First, as a kid, I somehow came up with the “piano keyboard metaphor” for why people are different. Something like, we all have the same keys available, but we just play different tunes. From there to the searchlight metaphor seems a small step (I can see your keys; you can see mine).

Second, I always kept coming back to that Lone Ranger episode in which the Lone Ranger and Tonto are looking for a buried treasure. They have some clue, like “If you go to Devil’s Peak on the Solstice, and look to the southeast, the treasure will be found where the eagle comes to rest at sunset.” So they are standing on the top of the Peak looking east and the sun is going down behind them, and they are straining their eyes to see birds in the sky when, all of a sudden, Tonto notices a strange shadow that is being cast on the face of a butte a few miles away, a shadow that looks like a plunging eagle! So they saddle up and go get the treasure.

- *When did you “discover” Holt?*

I think I first cited Holt in the 1990s. I really only read any extensive pieces of him as recently as last summer (2008) when I was awaiting and recovering from surgery. Probably a good thing, because the “mathematical” foundations of his ideas in *The Concept of Consciousness* (Holt, 1914) would never have made sense to me before my exposure to Santa Fe’s quasi-mathematical crowd—the “Santa Fe Complex” (www.sfcomplex.org) and the “Friday Morning Complexity Group” (www.redfish.com/friam). The leap that Holt makes from [Bertrand] Russell to the searchlight metaphor still seems bizarre to me—but fascinating.

However, prior to 2008, the only thing I really knew from that book was the searchlight metaphor, and I got anyone I could to read it.

- *The searchlight metaphor connected with you because of the Tolman background?*

Yes, earlier Tolman said that mental kinds are not things *in you*; rather they are things *of you*. Somewhere in the late 1980s I read the book, *Behaviorism and Logical Positivism: A Reassessment of the Alliance* (Smith, 1986), which lays out the connections between Tolman and the New Realists on the one hand and the Vienna Circle on the other hand. Tolman was trained by Holt and by Ralph Barton Perry, another leader in the New Realist Movement, and exchanged sabbaticals with the members of the Vienna Circle. Some of the members

of the Vienna Circle came to the United States in the run-up to the Second World War.

There is a paradox in the fact that I learned my New Realism from Tolman's students and colleagues shortly after his death. In 1925, Tolman renounced the New Realism in favor of a theory of internal representations . . . the very theory that I now deplore. He became, in fact, the "Father of Cognitive Psychology." As you know, I think Cognitive Psychology is the worst sort of double-talk. (To begin with, how could a psychology be anything *but* cognitive?) So the mystery is as follows: How was Thompson taught to think as a New Realist by the devoted associates of a dead man who had renounced the New Realism more than thirty years before?

- *How has the searchlight metaphor influenced your approach to problems in biology and psychology?*

You recall that my first move in this direction had to do with the tautology problem in evolutionary theory. To solve that problem, there had to be something that corresponded to adaptation that had no *logical* relation with natural selection. That was no problem for me, because Marler had taught me the comparative method as a tool for diagnosing adaptation in behavior and structure. I couldn't understand (still can't) why my fellow biologists fell into the circularity trap so eagerly. Like lemmings, they were. And I really got pasted when I started talking about "natural design" as the descriptive counterpart of natural selection, the property of nature that natural selection was called upon to explain.

The basic comparison between learning and evolution as parallel ways of producing design turns up in my second *Perspectives in Ethology* paper, "Toward a Falsifiable Theory of Evolution" (Thompson, 1981). I really owe this all to Benbow Ritchie.

Another origin of the natural design perspective is Jacob von Uexküll's (1934) *Stroll Through the Phenomenal Worlds of Animals and Men*, which we read in Frank Beach's seminar at Berkeley. Von Uexküll insists that every animal lives in its own life world that is "grasped" by its sensors and effectors. The essay is full of unforgettable illustrations of how our world is seen by different creatures. As graduate students, we discussed it mostly as an object of derision, but pretty quickly, I began to sense that it was compatible with behaviorism in some backhanded way. I want to say that both Skinner and von Uexküll are monists: von Uexküll wants to put everything in perception of the animal; Skinner wants to put everything in the behavior of the animal. So what von Uexküll

calls a “familiar path,” Skinner calls it an operant. This difference might seem to be important, but what matters is that both are trying to avoid dualism. After all, stimulus and response are inextricable. You can have one or the other in your theory. It doesn’t really matter which one you have, so long as you don’t try to have both. Despite their wildly different languages, Skinner and von Uexküll seem to agree on this point.

- *How does “natural design” fit in with the searchlight metaphor and the circularity problem?*

The idea of natural design arises from the attempt to solve the circularity problem. For natural selection to explain, there has to be some independent property of nature for it to explain. That property is natural design. Design is an observable property of some objects in the environment, a property that can be seen if you look at the world from the proper perspective. The perspective was the voyage of the Beagle—not the book, but the voyage. It is no coincidence that the two people that came up with the “Darwinian” theory of evolution were both trained naturalists who spent a lot of time wandering around on boats and shooting things. That “adaptation”—a.k.a. “natural design”—which is a property of nature revealed by travel is an example of the searchlight metaphor at play. Recognizing such an objective property solves the circularity problem—natural design is the thing explained by the two selection mechanisms in nature, natural selection and learning. Of course, recognizing the property is only the first step. It needs to be analyzed and mathematically formalized at least as thoroughly as natural selection, and I never could interest anybody in that project. This is one reason I recently began to think hard about the mathematical ruminations at the beginning of Holt’s *The Concept of Consciousness* (Holt, 1914).

- *But of course, nowadays most evolutionary biologists aren’t traveling that far. When I read your “Toward A Falsifiable Theory of Evolution,” one point that sticks out at me is that you are trying to identify what researchers see when they see adaptation. The most affrontive assertion in that article is not that the standard evolution talk is circular; the most affrontive assertion is that your colleagues are doing something reasonable, but that they will neither admit to it nor pursue its plain implications. The “lemmings” run across on a perfectly sound bridge, then double back when they realize they missed the gorge. Reactions?*

Indeed. What a wonderful metaphor! You have pointed to what is perhaps the greatest disappointment of my life: that my writing never

resulted in further comparative exploration of structures of environment–behavior relations that lead to attributions of “adaptation” or, as I prefer to call it, “natural design.” Every once in a while somebody takes a whack at it. . . . The mathematician Robert Rosen’s (1991) *Life Itself* comes to my mind. But if there were a literature of description in evolutionary biology one-tenth as sophisticated as the literature of explanation, we would be much wiser today than we are.

I made one attempt at deep description myself with a comparative paper on the structure of birdsong that reduced the plethora of birdsong terms down to just three operations and a handful of orders of magnitude. It was a good start, but nobody—including me—followed up on it.

Gibson, Holt, James

- *And then at some point you discovered Gibson. What was it that appealed to you about Gibson’s approach?*

Gibson was brought to my attention by Tony Barrand, one of my first students at Swarthmore, who went on to become a graduate student at Cornell and a Gibson enthusiast. I always felt some sort of kinship with Gibson, but I didn’t figure out what it was until I did my background reading for “The Misappropriation of Teleonomy” (Thompson, 1987). I think it was then that I figured out that Gibson was descended from the same “ancestor” as Tolman. The argument of Gibson that I found so compelling concerned the relation between sensation and perception. I agreed with Gibson that the idea that perceptual molecules were constructed from sensory atoms was nuts. This conviction became stronger when I was writing an introductory psychology text with Jim Laird (Laird & Thompson, 1991). On this point, I was a full-throated behaviorist: The idea of analyzing experience into its “primitives” is just plain fruity. If you have to do analysis to get at it, it ain’t a primitive. The distinction between sensation and perception is psychologically vacuous. Everything’s a construction or nothing’s a construction. So I went with Gibson (as Gibson went along with Holt), pushed any “construction” down to the physiological level, and treated nothing as a construction at the psychological level. Psychologically speaking, what you see is what you get.

- *It is strange that you find Holt and Gibson’s lines of thinking so appealing, while you report James being very mysterious. Why is the metaphor of “seeing” so much better than the metaphor of “experiencing”? That is, why is realism better than a world of “pure experience”?*

I guess because the metaphor of seeing so clearly invokes a point of view. Frankly, I have no idea what the “experiencing” word game requires. The implication of the searchlight metaphor is that any complete assertion of psychological truth requires three parts: (a) something about which the truth is told, (b) a point of view, line of sight, method of approach, etc., from which that truth becomes apparent, and, only lastly, (c) the truth itself. The best metaphor is the one that forces speakers to fill in the template completely every time they make an assertion of truth . . . *this is true of that from here*.

Notice that this point of viewedness is assuredly *not* solipsism. It’s not that each of us lives in our own world; rather, we all live in the same world, but we see it from different angles. The implication is that if I go and stand where you are standing, I will see the world that you see. Like all realisms, it is a socially convergent, not a divergent philosophy. I hate the expression, “We are all entitled to our own beliefs.” I suppose it is true as a legal fact, but as ideology, it spells the end of discourse. To me the New Realism concedes our right to a point of view while demanding our obligation to share it. Each of us is obligated to give clear instructions for how to stand where we are standing, so that others can see what we see.

Perhaps a better way to talk about these relations is not through “sight” or through “experience” but through the cue relation. Think about the classic field experiment in which English robins are induced to perform stereotypical displays when a researcher mounts red tufts of cotton on bits of wire and attaches them to twigs in the birds’ territories. I suppose one might say that the “fooled” robin *sees* “another robin” or *experiences* “another robin,” but both expressions seem to imply more than they should. Would it not be better to say that (a) for a male robin on his territory, (b) a red tuft on a wire is a cue to (c) the presence of another male robin. Notice how the use of the cue relation to describe this situation forces me to describe all three crucial aspects of the situation.

- *As a card-carrying Gibsonian, I am suspicious of cue language. Why is it not that (a) for a male robin on his territory, (b) red tuft on wire is (c) a thing to be attacked (using affordance language)—or—(c) a territorial threat (using adjective-y realism)—or—(c) a rival (using noun-y realism). I know we danced this dance a few times, but somehow for me cue-use is antithetical to realism. At least they have been historically been viewed as antithetical, though I admit that that is no proof of logical inconsistency in and of itself. I think the*

typical assumption is that a “cue,” by definition, is a thing interpreted rather than the thing itself—for example, to assert that someone sees a depth cue is typically to assert that they do not see depth.

No, I disagree: it’s to state the conditions necessary and/or sufficient for them to see the depth. Moreover, your suggestions don’t get around the problem that what the robin sees is not a territorial male robin *as we would see it*. It is not even necessarily a territorial male robin as our robin would see it if we took away his testosterone. Moreover, affordance language fails to disclose that “red tuft on wire” affords territorial defense *because* it has something to do with the plumage of territorial male robins. I would be happy with any locution that completely fills in the template, “to an S a C is an O,” where S is a subject, C is the conditions that produced a response, and O is an object that is functionally important to S. Gibsonian locutions don’t quite seem to do that, although, of course, I may misunderstand.

Battling Absurdities

- *You said that Holt’s understanding of consciousness leads to fewer absurdities than the alternative. Which absurdities does it avoid, and which does it generate?*

If you go with the New Realists, you have to assert up front that all so-called private mental states are, in fact, public. As soon as you make this assertion, your interlocutor says, “What? Are you out of your mind? Dreams are just ‘views of the world?’” And you have to say, “Yup!” But that’s it; that’s the crazy part, and it’s over right away. And even *that* idea is not *so* crazy. After all, if dreams did not give actionable information about the lifeworld of the dreamer, why would therapists ever ask about them? (see also Tonneau, this volume, and Charles, this volume)

The problems with the everyday dualistic account of consciousness are much more insidious (see also Costall, this volume). The dualistic account eventually leads to the bald assertion that one can “never really know” the mind of another. However, “Who knows my mind better, me or you?” is an urgent question in human affairs. Think how many arguments between spouses would be impossible if we all *really* believed that mind was the sort of thing that only its owner could know.

With dualistic mentalism, the problems come much later in the game. It’s not until someone has taken a deep draught of the mentalistic KoolAid that they realize, “What? Are you telling me that you

always know your mind better than I do? What about last Thursday . . . ? Oh, and by the way, when you speak of your own mind, whose is the mind that is speaking of your mind? And how, exactly does your mind come to know itself?" This sort of nuttiness is much harder to tidy up than the clear nuttiness of claiming that every dream tells you a truth about the world.

To put it another way, where you get with the New Realism is *not* having to say, later on, "Every human being is fundamentally blind to the causes of the behavior of every other human." This is because, in New Realism, everybody is potentially sighted with respect to what others "see" (see also Shaw, this volume), so the fact that we know so much about one another's impending behavior ceases to be a mystery. In the New Realist ontology, the mystery gets shifted from those occasions in which we know another's mind to those occasions in which we don't. So instead of having a zillion conversations of the form, "Isn't it wonderful that I don't, and never will, have a clue as to what you are thinking," you have conversations of the form, "How come I don't know what you are thinking today? Where is it that you are standing today that I cannot come to stand beside you and see what you see?"

- *But Holt's absurdity is a bit more than "just" saying that dreams are real?*

Well, more generally, we could say that Holt's system starts with one axiom, "I am an extensionless dot." You cannot argue with an axiom. Either you can accept it and see where it takes you, or reject it and close the book, shut down the file, or do whatever your present medium requires to break off communication between us. And don't try "I don't know what you mean?" You know very well what I mean; you just don't like it! Insofar as our *consciousness* is concerned, each of us is an extensionless dot, a point, merely a place in the world from which the world is viewed. There is no inside. There are no parts. There is no literal self-knowledge. The dot knows nothing of itself except what can be seen from it. Our consciousness is a place from which the world is seen, and everything that we are conscious of is in the world. If you can buy this single absurdity, everything else follows. No other faith is required.

Note that I am not denying that consciousness is *in some sense* a construction. We can, for instance, examine the retina, and the thalamus and the cortex and learn how our view of the world is mediated. But this mediation is physiological. Psychologically, the world is directly known.

- *One weird twist in this way of thinking is that because you claim to be able to see my mind, you also feel confident asserting that I believe these New Realist things too. You hinted at that above with the reference to “spouses arguing,” but can you walk me through it a little more explicitly?*

I am confident in asserting that I know a person’s mind when the pattern of the relationship between their environment and their behavior corresponds to the template for patterns that *are* wanting, feeling, thinking, believing, etc. The basic strategy is that mind is just the evidence for mind. What you see is what you get! If you spill coffee on my carpet three times after I ask you not to, I will conclude that you want to stain my carpet. Nothing that you say will cause me to change my view of your behavior, unless, of course, you cause me to see it from a different angle.

- *Let me rephrase more bluntly: On what basis do you assert that other people covertly think as you do? How dare you assert that everyone else believes they can see minds?*

Because even though they describe themselves as mentalists, they behave like New Realists. For instance, they freely anticipate my actions and many of them cheerfully offer interpretations of my behavior that, in retrospect, and to my great embarrassment, often seem more accurate than my own interpretations. People clearly believe they each can see my mind; their belief is *constituted* by their actions.

- *Do you really believe that others know your mind better than you do?*

Not usually. If my mind is “the world as illuminated by my behavior,” then it follows that “knowing my mind” is observing the relationship between the world and my behavior. Thus, “knowing my own mind” is behavior that illuminates *that* relationship. The material basis for mental-entities talk is not events hidden forever within the depths of the brain; rather it is complex, higher-order patterns of doing . . . doings about doing. To see these patterns in another person, one has to be around that person in many contexts and over a long period of time—analogueous to the length and breadth of experience required for Darwin to say that the Galapagos Woodpecker is a finch. So in a sense, my body is the Beagle, and since my point of view is, by definition, the only one that is always with my body, it follows that, *on average*, “I” will know “my” mind better than any of “you” will, only because “I” am around “me” more than “you” are. So it seems to me

that even a New Realist will have a bias toward accepting what people say about themselves, absent evidence to the contrary.

- *How does taking these ideas seriously affect your day-to-day interactions with people?*

I tend to think of most “inner-state” talk as delusionary, manipulative, or both.

I have a friend, a literary and artistic person, who always wants to know my “feelings” about things. I tell her the sun is bright today, that the Cheerios and blueberries I had for breakfast tasted especially good, etc., but she says, no, she wants to know my “feelings.”

And I say to her, “I don’t know what you mean.”

She becomes irritated with me and claims I am lying.

Now, there is a sense in which I suppose I do know what she means and, therefore, a sense in which I *am* lying. There is a language game called “talking about your feelings,” and I do know how to play it. I could tell her that the sun made me feel happy, and the cereal and berries filled me with a kind of confidence about the day. And she would be pleased by such moves because she wants me to talk about inside things, things about myself that I don’t reveal to other people. When I talk about things outside myself, like sunlight and cereal and berries, she feels she is learning only public things; but when I talk about my internal states, she feels she is getting something private, something of true value to me that others do not know.

But the fact that this game is often played does not mean that the assumptions of the game are correct. Is asking me to play the game “talking about my feelings” really the best way to get information about me? I doubt it. And as a literary and artistic person, she ought to know better. A young writer is taught not to blather on about how his characters feel, but to describe faithfully what they do and the world in which they find themselves. Similarly, young actors are taught not to “indicate” feelings, but to do the sort of stuff a “feeling” person would do. The best way to convey your feelings toward something is to describe the thing that is felt and the action of feeling it.

- *If everybody is really a covert New Realist, why do they (we!) persist in using mental terms in day-to-day conversation?*

I think it largely has to do with politeness. One of the surest ways to put another person down is to insist that you understand what they are doing better than they do. Furthermore, if I can convince a judge that you do not know the nature and quality of your own acts, I can get

you chucked in a mental institution. So in a legal sense, to admit that others might know you better than you know yourself is to confess to being not-quite human. We defer to the myth of private consciousness because it is socially convenient, but we all know it's false.

Also a lot of mind-talk is also in service of diverting attention of the self and others away from our actual behavioral priorities. "I would love to stand and talk to you, but I am *so* busy these days." We shouldn't accept such statements because "loving to do something" *is* exactly to continue to do it in the face of other demands. I think the world might be a better place if people were clearer about their true priorities. How liberating it would be if your colleagues would say things like, "Talking to you is important to me, but it is less important than playing Sudoku on my office computer for the rest of the afternoon." Of course, the problem is that few academics are capable of contemplating their own priorities. I had one colleague at Clark—I used to call him the White Rabbit—who would cross a hundred yards of campus every week to tell me that he didn't have time to talk to me. Boy, was *that* confusing!

- *Has this realist outlook had other effects on your interactions with colleagues?*

I move my wallet to an inner pocket every time any colleague starts to tell me his "true feelings." Also thinking this way has made me extremely leery of modal language: "coulda, shoulda, woulda," etc. Speakers who use this sort of language are usually trying to conceal rather than illuminate. Two examples: One of my colleagues would often talk about how the department "should" do something—by which she meant she wanted it done, but was too lazy to do it herself. Another colleague would interrupt a party conversation by saying, "I should go home now," which ostensibly illuminated a directedness in his behavior toward departure, but actually illuminated his desire turn the conversation to himself and to corner his hosts by the door for the next 20 minutes.

- *Wait a minute: Are you disgruntled with your colleagues because they use mental language or are you annoyed with them because they use it inaccurately or deceptively?*

That's a very good question, and I fear that there are other places in this conversation where I have displayed ambivalence on this issue. Forced to commit myself, I guess I have to say that I have no problem with mental language if it is deployed accurately. In each of the examples above where I am annoyed, my colleagues have said things

that would mislead people about the organization of their behavior, so I guess in those cases my problem is that what they said was deceptive or inaccurate.

Beyond that, I am also impatient with the explanations they give when they are caught attributing mental states to one another. When asked to explain these attributions, most people backpedal and claim that they were only “guessing” as to the “inner causes” of the other person’s behavior. Instead they should hold their ground and carefully describe what they saw. The talk itself may or may not be well founded, but the explanation for the talk, the post hoc backpedaling, is always nonsense.

- *When you get disgruntled, your arguments with students and colleagues follow a predictable format. Would you be willing to have me reproduce one of these arguments by playing the role of devil’s advocate.*

Sure. If you can stand thinking that way, I can stand answering. Devil’s advocate: *If feelings are something that one does, rather than something that one “has inside,” then the right sort of robot should be capable of feeling when it does the sorts of things that humans do when we say that humans are feeling something. Are you prepared to live with that implication?*

Sure.

Devil’s advocate: *So a robot could be made that would feel pain?*

Well, you are cheating a bit, because you are asking me to participate in a word game I have already disavowed, the game in which pain is something inside my brain that I use my pain-feelers to palpate (see also Natsoulas, this volume). To me, pain is an emergency organization of my behavior in which I deploy physical and social defenses of various sorts. You show me a robot that is part of a society of robots, becomes frantic when you break some part of it, calls upon its fellow robots to assist, etc., I will be happy to admit that it is “paining.”

Devil’s advocate: *On your account, nonsocial animals don’t feel pain?*

Well, not the same sort of pain. Any creature that struggles when you do something to it is “paining” in some sense. But animals that have the potential to summon help seem to pain in a different way.

Devil’s advocate: *But, Nick, while “paining” sounds nice in an academic paper, it is just silly otherwise. The other day I felt quite nauseous after a meal. I am interested in what it’s like to feel nauseous, and you*

cannot honestly claim that you don't know what feeling nauseous is like. Behavioral correlates aren't at issue; stop changing the subject.

What is “being nauseous” like? It’s like being on a small boat in a choppy sea, it’s like being in a world that is revolving when others see it as stable, it’s like being gray in the face and turning away from the sights and smells of food that others find attractive, it’s like having your head in the toilet when others have theirs in the refrigerator.

But you have brought us to the crux of the problem. Nobody has ever been satisfied with my answers to these “What is it like to be a _____?” questions. “What is it like to be in pain? What is it like to be a bat? What is it like to be Nick Thompson?” Notice how the grammar is contorted. If you ask the question in its natural order, you begin to see a path to an answer. “What is being Nick Thompson like?” “It’s like running around like a chicken with its head cut off.” OK. I get that. I see me doing that. You see me doing that. But most people won’t be satisfied with that sort of answer, because it’s the same as the answer to the question, “What do people like Nick Thompson *do*?” and therefore appears to convey no information that is inherently private. To me, the question, “What is it like to be X?”, has been fully answered when you have said where X-like people can be found and what they will be doing there. However, I seem to be pretty alone in that view.

Devil’s advocate: Now I see why you annoy people. I ask you a perfectly straightforward question about the quality of an experience and you keep trying to saddle me with a description of a behavior. You just change the subject. You clearly understand me when I ask you about the quality of feeling nauseous, yet you answer like a person who doesn’t understand.

Well, here you just prove my point by refusing to believe me when I say that; for me, feeling is a kind of doing, an exploring of the world. Where does somebody who believes that mental states are private, and that each person has privileged access to their own mental states, stand to deny *me* my account of *my own* mental states? You can’t have it both ways—you have run smack-dab into the ultimate foolishness of your position.

Summing Up

- *We are coming to the end of the interview, now. Would you like to sum up? Do you think a New Realist ontology would put the science of psychology on better footing?*

Yes! I imagine a psychology in which people reveal the design of behavior across time and space in a manner analogous to how Darwin revealed the design of organisms. There would be a lot more human ethology in my psychology (and a lot less inner-entities talk in my human ethology). Remember in Roger Barker's work that resulted in his book, *One Boy's Day?* (see also Heft, this volume), he observed variations in behavior across all the contexts of a person's life *and* variations in the behavior of contexts across a bunch of different individuals. If you want to think about a future for psychology, think of *One Boy's Day* written by a scientist who had all of Barker's tools and also had equipment for continuous monitoring of basic physiological measurements such as blood pressure, heart rate, cortisol, etc. Now *that* would be a true physiological psychology: one in which we don't confuse physiology with psychology, but learned the mediating factors (physiology) that accompany important reorganizations of behavior (psychology).

Look, here is the essential issue: Do we want a psychology that privileges the subject or a psychology that privileges the observer? I can hear our readers rising up en masse. We are *humanists!* Give us the *subject at all cost*. Well, OK, but just be aware of the price you are paying. What are these humanists going to do when they disagree? Two blind humanists groping an elephant: "I say it's a tree?" "No, I say it's a snake!" Together, "Well, as humanists we are all duty bound to respect one another's inner states, so I guess there isn't much more to say, unless we are willing to fight about it, and determine the answer by force." "Well, I don't really care." "Neither do I." "Bye!" "Bye!"

Forced to decide, I want a psychology that privileges the observer. After all, there is only one of me and four billion of you. Assuming that there is some sort of kinship among human beings, wouldn't it make more sense—even as a humanist—to find out what the other four billion are doing and generalize that to myself, rather than to peer into my own mental states and then generalize that to the four billion others? And wouldn't the most informative question to ask those four billion people be, "Where are you standing and what do you see?"

But are we forced to decide? The wonderful feature of the New Realism's metaphor is that it honors our separate points of view without giving up on finding a point of view that integrates them. Two blind New Realists groping an elephant: "OK, I'll follow the snake toward the sound of your voice and you follow the tree toward the sound of my voice, and we'll see what we feel along the way." *Pause*. Together, "My God, it's an *elephant!*"

- *Parting Thoughts?*

Well, only to thank you for pressing me on these matters. Since this may be the last academic writing I will do, I would also like to give thanks to some people who made my career possible: to John Trevor Peirce, who got me to leave Harvard, where I was miserable, and go to Berkeley, where I was happy; Gilbert French, who let me do my PhD research in his laboratory, so long as I didn't "bother him"; Peter Marler, who took me in when I was a poor wandering psychologist; to Patrick Derr, Peter Lipton, Gillian Barker, and Caleb Thompson, who indulged my fantasy that I could write philosophy and kept me from doing it too badly; to loyal colleagues, David Stevens, Jim Laird, and to Jaan Valsiner, who, as my anarchist chair, gave me three years of academic life at its best before the bean counters re-conquered the citadel and the mediocracy reasserted itself; and finally to the many undergraduate and graduate students and a postdoc, including Michael Boughey, David Richards, Robert Mitchell, Rose Sokol, Sarah Strout, and Eric Charles, who suffered me to add my name to their wonderful work.

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