



**Ordinary Magic, Part II:
How Ordinary People Create the Real World,
At a Glance and Out of Nowhere**

by

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Abstract

This paper explores in depth the ways in which persons spontaneously create the real world they live in. It offers an appreciation of the material in Malcolm Gladwell's *Blink*, including his observations on knowing that takes place in the "blink of an eye", along with a detailed re-formulation of the science underlying it. "Actor" concepts from Descriptive Psychology take the surprise out of Gladwell's observations and account for them systematically as simply a straightforward statement of what ordinary persons, exercising ordinary competence, do.

Human competence exercised at the highest levels looks a lot like magic. We already know that.

But human competence exercised at *ordinary* levels might as well be magic, since people routinely accomplish things that strike us as remarkable, and we have no credible account of how they do it.

Consider the following five examples, from Malcolm Gladwell's influential bestselling book, *Blink* (Gladwell, 2005):

- The J. Paul Getty Museum in California acquired a major work dating from the sixth century BC: a previously unknown marble sculpture, called a *kouros*. This sculpture was in remarkable condition. The Getty hired an esteemed scientist to run numerous tests on the kouros, using state-of-the-art equipment such as mass spectrometers and electron microscopes. He concluded without a doubt that the kouros was in fact as claimed. Subsequently and separately, six experienced experts were shown the

kouros. Each of the six had substantially different immediate reactions, but they amounted to the same thing: at a glance, they *all* knew that the kouros was a fake. To quote Gladwell: “In the first two seconds of looking – in a single glance – they were able to understand more about the essence of the statue than the team at the Getty were able to understand after fourteen months” (pp. 3-8)

- A research scientist, John Gottman, has shown that, by watching and analyzing a fifteen-minute segment of a husband and wife talking, he can predict with 90% accuracy whether the couple will be married fifteen years later. When the segment is reduced to *three* minutes, the accuracy of the prediction drops, but is still impressively high. (pp. 20-22)
- Another researcher, Samuel Gosling, asked total strangers, who had never met the students they were judging, to spend fifteen minutes with clipboards just looking around students’ dorm rooms. They were given no further orientation. The clipboard crew were then asked to answer a number of questions regarding the students’ personality, based solely on what they saw. Their answers were then compared to answers to the same questions which were provided by close friends of the students. To quote Gladwell: “... the strangers with the clipboard came out on top. They were more accurate at measuring conscientiousness, and ... much more accurate at predicting both the students’ emotional stability and their openness to new experiences.” (pp. 34-36)
- The psychologist Nalini Ambady took tape-recorded conversations between surgeons and their patients, picked two conversations for each surgeon, selected two 10-second segments from each conversation, and then removed from these segments the high-frequency sounds from speech that enable us to recognize individual words. The resulting 40-second “garble”, consisting of intonation, pitch and rhythm but with no content, was then played for judges who rated what they heard for such qualities as warmth, hostility, dominance and anxiousness. From these ratings alone, Ambady was able to predict accurately which doctors would be subsequently sued for malpractice. In other words, the accurate predictions were made based on 40 seconds of listening to nothing more than tone of voice. (pp. 42-43)
- The former tennis champion Vic Braden, when he turned to coaching, discovered that he always knew when a player would “double-fault” on the serve *before* the player even struck the ball. This wasn’t simple luck on Braden’s part; double-faulting among professionals is rare, happening perhaps three or four times in hundreds of serves each match. At one professional tennis tournament Braden set out to test his ability; he correctly predicted sixteen out of seventeen double faults in the matches he watched. But, try as he might, Braden has never been able to figure out *how* he knows. (pp. 48-49)

Remarkable, without a doubt – and Gladwell has plenty more where these came from. It is as if we discovered that weekend golfers were capable of making a hole-in-one, and then doing it again, and again, routinely and consistently. We

might suspect this to be magic (or, more likely, very clever cheating) because this does not fit with our common understanding of what ordinary people are capable of doing. We need some explanations here.

Gladwell goes on to extrapolate from these facts to reach some interesting conclusions, to wit:

- When the truth about the kouros finally emerged, the Getty's curator of antiquities Marion True said, "I always considered scientific opinion as more objective than esthetic judgments. Now I realize I was wrong." (p. 17)
- Referring to the expert's at-a-glance judgments of the Getty's kouros, Gladwell writes: "Can that kind of mysterious reaction be controlled? The truth is that it can. The power of knowing, in that first few seconds, is not a gift given magically to a fortunate few. It is an ability that we can all cultivate for ourselves." (p. 16)
- Further: "[This] is not an exotic gift. It is a central part of what it means to be human. We [do it] whenever we meet a new person or have to make sense of something quickly or encounter a novel situation. We [do it] because we have to, and we come to rely on that ability because there are ... lots of situations where careful attention to the details even for no more than a second or two, can tell us an awful lot." (pp. 43-44)
- And further: "... if we could not make sense of complicated situations in a flash, basketball would be chaotic, and birdwatchers would be helpless." (p. 46)
- Further still: "I think this is the way[it] works. When we leap to a conclusion or have a hunch ... [we're] sifting through the situation in front of us, throwing out all that is irrelevant while we zero in on what matters. And the truth is that [we] are really good at this, to the point where [it] often delivers a better answer than more deliberate and exhaustive ways of thinking." (p. 34)
- And finally: "We need to respect the fact that it is possible to know something without knowing why we know and accept that – sometimes – we are better off that way." (p. 52)

So far, so very good – and again, there's a lot more good stuff where that comes from. But Gladwell also offers *explanations* in *Blink*, and at this point we decisively part ways, because the "explanations" offered are inadequate – indeed, if one were not trying to be polite here, one would be inclined to say "absurdly inadequate." Consider the following:

- "The part of our brain that leaps to conclusions like this is called the adaptive unconscious ... not to be confused with the unconscious described by Sigmund Freud, which was a dark and murky place filled with desires and memories and fantasies that were too disturbing to think about consciously. This new version of the unconscious is ... a kind of giant computer that quickly and quietly processes a lot of data we need in order to keep functioning as human beings." (p. 11)

- Gladwell quotes a psychologist named Timothy D. Wilson as follows: “The mind operates most efficiently by relegating a good deal of high-level, sophisticated thinking to the unconscious, just as a modern jetliner is able to fly on automatic pilot with little or no input from the human, ‘conscious’ pilot.” (p. 12)
- “When [the expert] looked at the newly-acquired kouroos and blurted out, “I’m sorry to hear that”, she was ‘thin-slicing’ ... which refers to the ability of our unconscious to find patterns in situations and behavior based on very narrow slices of experience. ... [W]hen our unconscious engages in thin-slicing, what we are doing is an automated, accelerated unconscious version of what Gottman does with his videotapes and equations.” (p. 23)
- And about Vic Braden, the tennis coach: “The evidence he used to draw his conclusions seemed to be buried somewhere in his unconscious, and he could not dredge it up ... Snap judgments and rapid cognition take place behind a locked door.” (pp. 50-51)

Alas, there is a lot more where these came from as well.

These explanations are painfully inadequate – but in case that’s not immediately obvious to you, we will look at them in depth later. And this has little to do with Gladwell himself; although as a journalist he adds some evocative terminology, he essentially uses the “explanations” offered by the scientists whose studies he documents.

So let’s be clear from the start: I have no problem with Malcolm Gladwell. I am in fact a fan of Gladwell. His writing is clear and engaging; he chooses interesting topics, does justice to his sources and offers coherent and thought-provoking analyses. You really can’t ask for much more from a journalist. And the material we’re considering here by no means exhausts what Gladwell covered in *Blink*. It’s a terrific book; I urge you to read it if you have not already done so.

Malcolm is a messenger, and the issues are with the message. To paraphrase Marc Antony: “We come here, not to *praise* Gladwell, but to *bury* – not him, but his science.”

The Science Behind *Blink*

Let’s look at some of those “explanations” in *Blink*: “thin-slicing”, “adaptive unconscious”, “the closed door.” Notice the obvious: while *Blink*’s findings and conclusions are about persons, their abilities and behavior, *not one* of the explanations uses person or behavioral concepts. (The “adaptive unconscious” comes closest, if you ignore the fact that it is “a kind of giant computer”.)

What’s wrong with that? If you go by what you read every day, not much, because we constantly find reports of people doing things accompanied by explanations just like Gladwell used in *Blink*. But if you dig a little deeper, using the tools of

Descriptive Psychology, you see that there's a great deal seriously wrong with this kind of "explanation".

A little background: In the 1960's Peter G. Ossorio, the founder of Descriptive Psychology, made a very simple observation about science. He pointed out that, in order to theorize about some aspect of behavior and do empirical research on it, you first must describe it in *non*-theoretical terms. And to do *that*, you need a shared framework of concepts with which to make the distinctions you use in describing.

This is just common sense. If you want to measure the nutritional makeup of Honeycrisp apples, you need to be able to describe a Honeycrisp well enough to pick it instead of a Gala or Golden Delicious (or a pomegranate).

This seems pretty obvious. But you may find it surprising to hear that, at the time, it was a radical insight. In the 1960's, you actually found personality texts saying things like "Personality is defined as whatever a particular theory says it is." Ossorio went on to articulate such a conceptual framework, which we have already encountered in "Ordinary Magic" as the core of Descriptive Psychology.

Here's the really astonishing part: standard behavioral science in 2009 is still making the obvious mistake Ossorio pointed out over 40 years ago! They "study" persons and behavior without a shared framework of concepts that include persons or behavior. So they patch together findings expressed with some special purpose labels, and "explain" those findings by, essentially, changing the subject.

Take "thin-slicing", for example. That's the label Gladwell's scientists used to refer to a person's ability to reach highly accurate conclusions in a very short time. This is an example of a common practice among behavioral scientists that amounts to a kind of institutional identity theft: seeking reflected credibility by borrowing established terms from more prestigious sciences. In the 1960's the prestigious target was physics; today we tend to dress in the clothes of biology.

"Thin-slicing" is in fact borrowed from biology, which has an actual practice of taking tissue samples and slicing them into very thin slices. These thin slices, perhaps treated with dyes to enhance contrast, can then be viewed under microscopes, and things can be seen that are not visible in thicker samples. Thus, in biology, "thin-slicing" is a term that refers to an actual and useful practice. And since the original research reported by Gladwell took tape recordings of behavior and presented only a brief segment for viewing, one can see how someone familiar with biological practice might, with a chuckle, refer to the method as "thin-slicing".

Used as a metaphor, not to be taken literally or seriously, "thin-slicing" could be a clever substitute for the actual and accurate description of what is going on. But there's a big problem here – *no other description is offered*. The research led to the conclusion that people have the ability to "thin-slice". But in real life, when

there is no tape-recording, what exactly are people “slicing”, and how? The real danger here is that once scientists take their “thin-slicing” metaphor seriously, they might take these “what” and “how” questions seriously as well, and set out to do research on them. Which, alas, is exactly what they have done.

What is called for here is not just pointing out that this emperor is seriously naked; what is called for is to provide some appropriate clothes. In other words, we need to replace “thin-slicing” and so on with explanations that *can* be taken seriously at face value. Descriptive Psychology can do that, as we shall see now.

Real World and Reality

The lack of a conceptual framework for persons and behavior is bad enough. But a bigger problem with the explanations in *Blink* is the view of the real world they are built on.

It may seem odd to talk about a “view of the real world” – after all, the real world is the real world, and there’s really only one, right?

No. One of the great and useful insights of Descriptive Psychology is that this common “one-and-only-one real world” idea is a very partial view. You can’t do justice to the reality of persons and behavior within it, any more than you could do justice to the motions of planets within a view that puts the earth at the center of the universe. So let’s look at the “one-and-only one” view a little closer.

Physics is widely acknowledged as the gold standard of science: science if ever there was a science. As such, its view of the Real World is as close as we can get to a certified cultural given.

That view was nicely summarized in a 2006 book by Lee Smolin, a theoretical physicist with impeccable credentials and standing in the physics community. Smolin writes:

“Physicists have traditionally expected that science should give an account of reality as it would be in our absence. Physics should be more than a set of formulas that predict what we will observe in an experiment; it should give a picture of what reality *is*. We are accidental descendants of an ancient primate, who appeared very recently in the history of the world. It cannot be that reality depends on our existence. ...

“Philosophers call this view *realism*.” (And Smolin later in his book proudly identifies himself as a realist.) “It can be summarized by saying that the real world out there (or RWOT, as my first philosophy professor used to put it) must exist independently of us. It follows that the terms by which science describes reality cannot involve in any essential way what we choose to measure or not measure.” (Smolin, 2006, pp. 6-7)

In other words, “Pay no attention to the man behind the curtain.” This, from the good folks who gave us quantum electrodynamics and general relativity. I guess that just goes to show what the “accidental descendants of an ancient primate” can do when they put their minds to it.

Smolin’s quote highlights precisely two inherent aspects of the physicist’s “realist” view of the Real World which disqualify it for being taken seriously in behavioral science:

1. While physics may be able to get away with ignoring the physicist and the doing of physics, behavioral science cannot. Any science that sets out to account for all behavior (which is the point of behavioral science) must straightforwardly apply to the behavior *of* behavioral scientists *doing* behavioral science. After all, *doing* behavioral science is one form of behavior. This “reflexivity” standard eliminates the convenient “realist” fiction (which interestingly may have proved to be rather inconvenient for physicists in the 21st century; the title of Smolin’s book is *The Trouble with Physics*.)
2. Smolin follows standard practice in physics in using “reality” as equivalent to the real world. As it turns out, this doesn’t work in behavioral science; one of Descriptive Psychology’s truly profound contributions is its articulation of Real World and Reality as related but separate concepts. To do justice to persons and behavior, we need both.

If the “one-and-only-one” view of the real world doesn’t work for understanding behavior, what does? We are about to head into some deep waters here – not Einstein-relativity-theory deep, but at least pay-close-attention-for-a-while deep. Fasten your seat belts.

The Real World as a world of persons, not things

The Real World

The Real World is, fundamentally and essentially, “a world of persons and their ways”. (Ossorio, 2006a, p. 3) The world consists essentially of persons and their actions. Everything that appears in the “realist” view – apples, trees, stars, birds, beasts, quarks and quacking ducks – all appear in here as well, as parts of actions taken by people. Furthermore, the Real World is not “out there” in any sense; it is a world I “construct, maintain, and reconstruct through my behavior.” Ossorio (2009b).

In other words, we ordinary people create the Real World.

This is a rather breath-taking assertion. Taking it seriously requires some reflection and explanation. Here’s Ossorio on this exact issue:

Outside of Descriptive Psychology a reference to world construction, world maintenance, and world reconstruction is not unlikely to meet with a

bright smile and a disclaimer: “You must be speaking metaphorically. *Surely*, you don’t mean, *literally*, world construction, maintenance, and reconstruction.” The appropriate answer in the present case is, “No, it’s not a metaphor, and, yes, I mean *literally* world construction, maintenance, and reconstruction.” Questions then tend to be along the lines of how one could do that, why one would do that, what guarantees does one have that it has been done right, and so on.

When it comes to world reconstruction, we can sometimes use the poets as one source of ideas. For example, we have our old friend Omar Khayyam, who says:

“Ah, love, could you and I with Him conspire
To change this sorry scheme of things entire
Would we not shatter it to bits, and then
Remold it nearer to our hearts’ desire?”

To those who look askance when we say, “No, I mean, *literally*, ...” I suspect it must seem that we are referring to some Godly exercise of power such as this. What Khayyam describes so vividly is what one might call a brute force, straight wish-fulfillment approach to the matter. And it is not open to us. We can’t “shatter it to bits, and then remold it nearer to our hearts’ desire.” Unless we can, of course.

How, then, and what, then? What mechanism, what procedure, what agency is available for reconstructing my world?

There is a certain kind of alternative to the “shatter it to bits” approach. A philosopher, Stanley Cavell, in explaining the difference between Wittgenstein’s philosophy and traditional philosophy, said roughly the following. “For Aristotle, to speak the truth is to say of what is *that* it is. In this new way of talking, to speak the truth is to say of what is *what* it is.”

In creating worlds, and in reconstructing worlds, we don’t do it by creating stuff and moving it around. Rather, what we create is its being what it is. (Ossorio, 2009).

This orientation turns out to be essential to understanding and re-formulating the science in *Blink*. The research establishes *that* it is; the re-formulation says *what* it is.

Reality

Having recognized that we create the Real World, we immediately confront the fact that we do not, in fact have God-like powers. We can’t just create any old world we like; we run into actual constraints on what we can get away with. Our old friend Gil can talk about his “comebacker” golf shot which goes past the

green, pauses in the air, and comes back to land near the hole, but neither he nor anyone else can actually make that shot. I might want a world in which I am a billionaire, or a Nobel Prize winner, or Paul Newman's best friend, but no real world I know how to create includes those heart's desires.

These inherent limits on what we can actually do are articulated in Descriptive Psychology in the concept of Reality. Reality is *not* just another word for the Real World. Nor is it, as in common usage, some special and privileged kind of Real World (the *really* real world, so to speak). Instead, Reality is a set of boundary conditions on our behavior as Persons. Since our behavior as Persons includes constructing, maintaining and re-constructing worlds, Reality is a set of constraints on our Real Worlds. (Ossorio, 1969/1978/2009)

“So we create the Real World, which can vary depending on lots of things, but Reality is in fact fixed and secure, which keeps us honest, right?”

Well, almost, but not exactly. It is true that Reality is fixed at any given time; we either can, or cannot, actually bring off a given behavior. But it is also true that the limits on human behavior change over time, sometimes dramatically. In the 18th century if you wanted to hear a Beethoven symphony you would need to find a public performance of it somewhere, get invited to a private performance, or hire an orchestra to perform it for you. Today, if I want to hear a Beethoven symphony, I take my ipod out of my pocket, put on earphones and plug them in, look for the right file and press Play. I can listen to a Beethoven symphony anytime I like; the real world of the 18th century *in reality* did not include that behavioral possibility.

Reality itself, then, can change as our behavior potential changes. This will prove to be both exciting and challenging in the light of our formulation of the material in *Blink*, which we turn to now.

***Blink*: A Descriptive Psychology Formulation**

The science underlying *Blink* conceives of the mind (or the brain, or the adaptive unconscious) as “a kind of giant computer”.

This is a very common conception in both popular culture and various sciences. It is perhaps best illustrated by an iconic sequence of images found in every Terminator film and TV episode:

The killer robot enters, scanning the room with its camera-eyes. A torrent of pixels is sent to its central processing unit, where specialized software extracts images of objects from the data stream. Pattern-recognition software identifies one object as a face. The processor then uses facial-recognition software to check the face against a database of persons of interest to the robot, makes a match, checks the person's

identifier against the robot's purposive protocols, finds a matching protocol and initiates a sequence: "Terminate".

"See, that's sort of how people do it, only with eyes and brains instead of cameras and computers and stuff – right?"

Well, no. Not even close. To begin with, this doesn't even describe how actual robots function, let alone people; the sequence just described is far beyond the capabilities of any hardware/software configuration on our planet in 2009. Take that little first step, extracting images from a torrent of pixels. It can't be done. Not even close. The very best, top-of-the-game software we have today can take a pre-selected set of pixels and do a reasonable job of identifying the presence of a specific object, like a face. That's a little like having an adult walk alongside the robot, saying "Look there, just in this small area. Can you see the face? Show me the face. *Good robot.*" And no, we haven't a clue as to how to have another robot take the place of the adult.

More to the point, we have no evidence whatsoever that this cybernetic image in fact describes how people know things. Let me repeat that: *We have no evidence whatsoever.* Quite the contrary: both research and common experience indicate that the cybernetic image not only *does not* describe how people know things, it *could not* describe it. As a literal description, the cybernetic image is a non-starter, and it's a lousy metaphor because it invites us to pursue dead-end lines of research such as pattern recognition processes in the brain. (Contrary to what you may have read in the popular scientific press, scientists haven't found any of those, either, and it has not been for lack of trying. The best scientists have is some "encouraging" studies which show that certain parts of the brain "light up" when a certain pattern is recognized. That's roughly equivalent to saying that certain circuits in your ipod "light up" when you play "Lucy in the Sky with Diamonds", and then claiming this to be encouraging evidence that those circuits will soon be shown to be the true source of Beatles songs.)

"But hold on here; surely you're not saying we don't store and access information, just like computers do, only with brains instead of computer chips?"

That's exactly what I am saying. We'll get to that "store and access information" part soon, but first let's take a hard look at the so-called parallel between brains and computer chips.

A memory chip is made up essentially of a very large number of transistors, tiny objects made of silicon and/or other inert materials, whose sole purpose is to be exposed to an external charge that sets it to "1" or "0" and remain in that state for future inspection. These transistors are "hard-wired" into a connected whole by miniscule wires etched on the surface of the chip.

A brain contains a truly gigantic number of neurons, which are tiny, living, growing, self-regulating cells which actively and reactively connect to other

neurons in a complex biochemical soup involving genetic structures that affect neurons in ways we are only beginning to understand.

Even if we take it that the brain is somehow in charge of knowing (we will abandon that notion soon enough), in what meaningful way are memory chips and brains alike? Other than the article of faith that says they both “process and store information” – none. In fact they are obviously, wildly different on any number of counts.

Bluntly: The mind/brain/unconscious as giant computer is a *metaphor* and nothing more: a fictive way of talking, which turns out to be an *inconvenient* fiction, leading us astray more than it adds clarity. There is a point to **not** talking that way – and so, we will not.

Instead, we will work within a framework that does bear the weight required.

A-O-C

When we look at the world of persons and their ways, what do we see?

We see people living their lives in one of the ways known to their culture, in the world as they find it to be. We see people being who they are; and who they are – in addition to themselves, of course – depends essentially on what place they occupy within their communities. We see people doing and saying things, typically engaged with other people in some social context such as a family or organization or group of friends. In doing what they do, we see people using facts that are known to them, as well as the concepts and locutions of their communities, to participate in social practices in one of the ways that can be done. They use available objects to engage, to the best of their abilities and in their own particular ways, in specific actions that result, typically, in what they are after.

These are the fundamental facts of the world of persons and their ways. It is indeed a very complex world we all live in. But then, we already knew that, didn't we?

To help make sense of all this complexity, Descriptive Psychology has articulated a very important concept known technically as “A-O-C”: Actor-Observer-Critic. Briefly:

When a person does something – anything at all – he simultaneously has three relationships to that action and the world within which it takes place:

1. Actor, who actually does the behavior,
2. Observer, who observes and as needed describes what is done, and
3. Critic, who compares what is done and its outcome to relevant standards and, as needed, draws conclusions on what corrections are required.

There is *no* implication here that these are three distinct entities or sub-persons or systems or ego states (whatever those might be). A-O-C refers to the simply observable fact that ordinary people routinely accomplish all three of these when they act. Ossorio referred to them as “jobs” we perform in behaving, and we seem to do all three automatically and competently; that is, when we act, we don’t make an effort to become an Actor and then become an Observer/Critic – it’s all part of the package.

Now here’s an obvious but perhaps tricky point: all three – Actor, Observer and Critic – are engaging in Intentional Action: the Actor in the action itself, the Observer in observing and, as needed, describing, and the Critic in assessing and, as needed, correcting. Therefore, each job requires “Knowing” – the making of relevant distinctions – in order to succeed. But here’s where it gets really interesting, because on closer examination, it turns out that *the way* in which things are known is different for the Actor as compared to the Observer and Critic. And this difference is not small or merely technical – Actor knowing is *categorically* different from Observer and Critic knowing.

This one fact unlocks the “closed door” Gladwell referred to, and provides the means to formulating the extraordinary findings reported in *Blink* without resorting to misleading metaphors.

Knowing

In RWOT talk, “knowing” is used to refer to a process that results in a true conclusion. Knowing is some form of data-processing – like a “giant computer” – involving some form of information storage and retrieval along with automatic pattern-recognition processes. Knowing often takes place on both conscious and unconscious levels; in either case, it involves thought and thinking.

Now – ignore all that. In making the transition to the world of persons and their ways, we leave all that behind.

In our world of persons and their ways, what do we mean when we use the word “knowing”? We mean that a person has made relevant distinctions, and we know this is so because they have acted on those distinctions. “Knowing” is an aspect of doing, in the same way that hue is an aspect of color. All colors have a specific hue, and hue does not exist separately from color; likewise, all actions involve specific knowing, and knowing does not exist separately from action.

Note that this is substantially different from “knowing” in the RWOT world. In particular, note:

1. Knowing is not a process.
2. Knowing does not require thought or thinking.

These two points plainly mark departure points from standard behavioral conceptualization as seen in *Blink*. Let’s dig into them.

Knowing is not a process

A time-tested move in science is to create explanations by looking for an underlying causal process. We explain motion completely by looking at underlying processes involving force, mass and inertia. We explain chemical reactions completely by looking at underlying processes involving valence and bonding of chemical elements. We explain disease completely by looking at underlying processes involving germs and cells. (OK, so at this point we acknowledge that germs and cells aren't the whole story of disease, but that just means there are other underlying processes we need to account for.) This move has been so successful that it has become scientific dogma: To give an explanation is to look at underlying causal processes.

But of course that's nothing resembling the whole story. "Causal" is only one among many relationships that can exist between elements of the real world, and it is quite limited in its range of application: The more you dig into it, the fewer places you find where it actually fits. And "underlying" when applied to knowing turns out to be nothing more than a case of the old con-game "bait and switch". Every *successful* instance of underlying process explanation involves processes and elements within the same conceptual realm as that which is being explained. Motion, force, mass and inertia are all physical concepts; reaction, valence and bonding are all chemical concepts; disease, germs and cells are biological concepts.

But as we noticed earlier, "underlying causal explanations" for the behavioral concept "knowing" all take the form of brain (biological) processes or information-processing (cybernetic) processes. As behavioral scientists we have been acting like the drunk who looks for his lost keys under the streetlight even though he lost them in a dark alley; he looks under the streetlight because the light is better there.

The problem here isn't just that biological or cybernetic processes *don't* explain behavioral facts; it's that biological or cybernetic processes *couldn't possibly* explain behavioral facts, any more than you can explain texture by underlying color processes, or drive a nail with b-flat.

In our world of persons and their ways, knowing is *not* a process, and it is not explained by underlying processes of any sort. Knowing is a fact (technically, a state-of-affairs) which is explained by its place in a complex state-of-affairs called behavior. In the spirit of the Cavell quote cited earlier: "For 'realist' scientists, to speak the truth about knowing is to say *how* something is known. In this new way of talking, to speak the truth about knowing is to say *what* is known, and by whom."

Spoiler alert: That “by whom” part will prove to be remarkably interesting.

Knowing does not require thought or thinking

At this point it may seem as if we have stepped through Alice’s Looking Glass.

“What could he possibly mean by that: ‘Knowing does not require thought or thinking’? What else is there to knowing, if you eliminate thought and thinking? Why, going all the way back to the Greeks, everything we have said about knowledge has emphasized the importance of thought and careful reasoning. Descartes even said, ‘Cogito, ergo sum’ which in plain English says ‘I think, therefore I am’. And this guy is asking us to throw all that out for what – instinct? I don’t think so.”

These are understandable objections, and they deserve a considered response. First, let’s acknowledge the validity of the historical points, and recognize that they remind us of exactly how deeply rooted, and for how long, the “realist” view of the world has been in our cultural history. Our traditional views of knowledge and knowing have all been Observer/Critic views for a very simple reason: they couldn’t be anything else! What counts and has always counted in intellectual discourse is what is publicly stated and debated; but of course, that’s Observer/Critic knowledge. Actor knowledge is for the person to engage in his own action; Observer/Critic knowledge is for making things public and discussable.

But remember: making an observation is itself an action, and as such requires Actor knowledge. For instance, that gnawing feeling in the gut telling you that something’s fishy here, or that excitement that says this may be really new and useful, is your Actor’s knowing informing your action of observing and critiquing.

Let’s further recognize that we are not “throwing out the baby with the bathwater”. We do not claim that thought and thinking is somehow an illusion, or is unimportant, and we would be the last to dispute the importance of careful reasoning. Thought, thinking, reasoning: all these are central and crucial to knowing by Observers and Critics.

But knowing by the Actor is a different matter entirely. It is categorically different from Observer/Critic knowing. Although Actor knowing can at times involve thought, it does not *require* thought and thinking. And, no, it is not some variety of “instinct”. This alternative view, at least in its articulation, is indeed new and significantly different. It might be provocatively characterized by reversing Descartes: “I am, therefore I think.”

Now that we have said what Actor knowing is *not*, let’s turn our attention to what it *is*.

Actor’s knowledge

Actor's knowledge is the immediate, first-hand, before-the-fact knowledge of the author of an action. It is not observation nor inference; it is *recognition*. I only recognize things that have a place in my world. What I recognize something *as* is in terms of its place in my on-going structure of behavior, and I may or may not have a thought about it. And of course, what I am capable of recognizing essentially depends on my developed competence.

Let's unpack all that just a bit.

Recall "The Picture of Winston Churchill" from "Ordinary Magic". This image reminds us that we are the authors and producers of our own behavior; our behavior is what we produce it *as*. We know what our behavior is before-the-fact, otherwise we could not do it on purpose. As Actor, we do not know our behavior as the Observer does, by observation; we know it directly, first-hand.

First-hand, direct knowing takes various forms which are quite familiar to us (in both senses of that word.) They include feelings, images, insights, decisions, impulses and, yes, thoughts – the kind of thoughts that seem to pop into our minds, out of nowhere.

In this light let's revisit those art experts who all knew at a glance that something was wrong with the Getty's kouros. When one was shown the statue and told it would soon become Getty's property, she found herself impulsively exclaiming: "I'm sorry to hear that" – but she didn't know why she said it. Another expert, on first glance, found that the word "fresh" popped into mind – definitely *not* a word one associates with 2600-year-old statues. A third took one look and "blanched" – his complexion literally lost color. Another reports that "I felt as if there was a glass between me and the work"; another reports "a wave of intuitive repulsion". All Actor's knowledge, all direct and first-hand recognition, and none involving a process of deduction, inference or thinking.

As with the experts, so it is with ordinary persons, moment-to-moment, day-to-day. What appears to be some extraordinary production of a giant unconscious computer turns out to be what all of us do, routinely, all the time.

"But wait a minute. Surely you're not saying any of us would have recognized the fake at a glance? Those were remarkable insights by experts!"

Yes, they were, and of course I'm not saying any of us could do it, any more than just any of us could recognize what went wrong in a knitting pattern (which my wife can do, at a glance), or any of us could recognize a corner blitz in football before it happens, which any quarterback in the NFL must do at a glance, or recognize an augmented fifth as it's played, as any concert pianist does.

Every person has developed competence in recognizing those aspects of the world that are have meaning for them, and we use that competence to create, maintain

and navigate our way through our world. In fact, our Actor's knowledge enables us to create meaning in our lives, by what we treat things and situations as being. Persons do not *find* meaning in the world; we *create* it on an on-going basis.

What do Actors recognize? We recognize whatever has a place in our world, that is, whatever we require to fill a role in our on-going drama. If something has no place in what we are doing, we literally may not recognize it even if it is clearly "there" and we will certainly not recognize it if we do not have the competence to do so (unlike my wife, I wouldn't recognize a dropped stitch in knitting if my life depended on it.) This is nicely illustrated by a delightful quote from a book titled *Inside of a Dog: What Dogs See, Smell and Know*:

"To a dog, a hammer doesn't exist. A dog doesn't act with or on a hammer, and so it has no significance to a dog. At least, not unless it overlaps with some other, meaningful object: it is wielded by a loved person; it is urinated on by the cute dog down the street; its dense wooden handle can be chewed like a stick." (Horowitz, 2009).

As with dogs, so with people; if we don't act "with or on" something, it has no significance for us, and we will not recognize it for what it is in the public, Observer/Critic world.

Conclusions

We have acknowledged the important observations in Malcolm Gladwell's *Blink*, that:

"The power of knowing, in that first few seconds, is not a gift given magically to a fortunate few... [It] is not an exotic gift. It is a central part of what it means to be human. We [do it] whenever we meet a new person or have to make sense of something quickly or encounter a novel situation. We [do it] because we have to, and we come to rely on that ability... When we leap to a conclusion or have a hunch ... [we're] sifting through the situation in front of us, throwing out all that is irrelevant while we zero in on what matters. And the truth is that [we] are really good at this, to the point where [it] often delivers a better answer than more deliberate and exhaustive ways of thinking ... We need to respect the fact that it is possible to know something without knowing why we know and accept that – sometimes – we are better off that way."

We have offered a fresh, substantially different scientific approach to making sense of these observations that does not rely on misleading metaphors derived from an inadequate view of science and the world. We have seen that, far from being the exceptional product of unconscious processes, this "at a glance" knowing is a common, everyday aspect of Actor's knowledge as we create and navigate our world.

Let's conclude with, literally, a vision, from Ossorio's masterful summation of his life's work, *The Behavior of Persons*. I call this a vision because it is a depiction of what the Actor sees, and unlike the "torrent of pixels from which we extract patterns", it is meant to be taken literally:

"As an Actor I see the real world as a field of action, as the domain within which I live my life. In it are givens and possibilities, opportunities and non-opportunities, hindrances and facilitations for behavior. In it are reasons for acting one way or another. I am sensitized to behaviors that are available and ways of being that are available. There is no question of who or what I am – I am *me*. There is no question of my inclinations and proclivities; I do not need to *know* what they are, although I often do – what is primary is that I *have* them, and my having them is not something different from being me. In particular, they are not peculiar entities or forces that *cause* me to do what I do. Ideas come – I do not send for them nor do I receive them as information. Theories come. Visions and inklings of the future come, and their coming is not something different from *being* me. All of this is embedded in my actions and in the short term and long term structures of action and being that I compose, sometimes ad lib, sometimes without realizing it until later, and sometimes upon casual or serious reflection." (Ossorio, BOP, 2006, p. 255)

This may seem to be claiming extraordinary power. With the help of Descriptive Psychology, we can recognize it as simply a straightforward statement of what ordinary persons, exercising ordinary competence, do.

Epilogue

This is a revised version of a talk by the same name given to the 31st Annual Conference of The Society for Descriptive Psychology on October 10, 2009. In the revision a major section entitled "Descriptive Psychology and Science" was removed, mildly edited, and published as a separate paper (Putman, 2009b). Thanks to C.J. Peek, Ken Anbender, and members of the conference audience whose reactions informed the revisions.

Many questions arise that have not been addressed. I take this to be the expected and desirable result of offering a new conceptualization to a set of established but misconstrued facts. In particular, very briefly:

- Once we have displaced the brain as being in charge of knowing, how can we understand the relation of brain to person? Part of the answer is obvious: we use our brains to think, just as we use our hands to pick things up. But that's by no means the whole story, and that story is interesting.
- A good scientific account does a better job of explaining the facts at hand than does the theory it supplants. I take it that this is evidently the case here. But a sterner additional test is traditionally applied: does the new

view generate research and predictions that are interesting, and different from the standard view? As it turns out, the Descriptive Psychology view of behavioral science is particularly rich in this aspect. For example, the burgeoning field of neuropsychology and brain research is ripe for a Descriptive reformulation. Exciting work that has been formulated as showing the existence of so-called “mirror neurons” is better formulated as showing the functioning of “observer neurons”, and this leads to specific research predictions that can conclusively determine which formulation in fact applies.

- The conceptual connections among Actor, Observer and Critic have already been spelled out in some detail, but there is still fruitful elaboration to do. In particular we will get considerable mileage from a deeper examination of the interconnections among A-O-C, Actor’s knowledge, Communities, Conscious of and Conscious as, Real Worlds and the Dramaturgical Model.
- Deep reflection on Actor’s knowledge throws a strong light on some the intractable problems in creating a person in a non-homo sapiens embodiment – an artificial person if you will, or, as Ossorio so deftly named it, an Authentic Robot. Giving a robot Observer/Critic knowledge is hard, but we at least know how to proceed. We have no clue about how to give a robot Actor knowledge. Giving a robot self-knowledge is technically feasible; the trick is giving the robot a self to have knowledge of. This is where Descriptive Psychology’s “non-mathematical use of mathematics” may come in handy. (Ossorio, 1969/1979/2009; Putman 2009b)

All these questions, and more, must await another time, another paper.

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