

What Experience Doesn't Teach

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You aren't supposed to talk about it. Not really. And certainly not in front of the kids. But that isn't why you don't remember it. That isn't why you don't remember the way it feels. You don't remember the way it feels because it doesn't leave a memory trace to begin with. The facts are retained, but the feeling disappears.

What I'm alluding to is the pain of childbirth—hush, don't let my kids read this, but it did hurt! Yet although I can remember that labor pains hurt, I can't remember what they felt like. Although I can remember that they were too traumatic to sleep through and that while standing under the shower trying to alleviate the agony, I tore down the soap dish bolted into the wall, I can't conjure up the sensory experience itself. Although my memory of the events leading up to the birth is pellucid—I remember how the nurses were impressed that I wanted to suffer through it unmedicated and how, when it came down to the wire, my obstetrician started humming Blue Moon—my memory of the bodily sensations is nonexistent. Introspection, here, reveals an utter blank. Contrary to the adage about experience being the best teacher, experience's pedagogy was an utter failure.

That experience is not always the best path to knowledge should, of course, come as no surprise. "When are you going to learn?" your best friend asks you after you have fallen, yet again, for one of those dark, handsome, heartbreakers. No, we often don't learn from experience. In fact, the theory that the only path to truth is through reason rather than experience—a position in philosophy known as "rationalism"—is nearly as old as philosophy itself. Through reason, the rationalist says, we can prove that the internal angles of a triangle sum to exactly 180 degrees, yet if we were to simply infer from our experience of seeing drawings of triangles and triangular objects, we would arrive at only an approximation of this truth. Through reason we can determine that the face we seem to see in the door knocker is a figment of our imagination, whereas our experience of the knocker makes us jump back in fear. If experience is a teacher at all, says the rationalist, it is a teacher that can't be trusted.

The seventeenth century philosopher and mathematician, Rene Descartes championed such a position by pointing out that the information we reap from our senses is often incomplete and inaccurate. A rectangular tower, he tells us, may appear cylindrical when viewed from afar, and a colossal statue perched at the top of this tower may appear miniscule when viewed from below. Even the piece of paper you seem to see in front of your nose, might be part of a vivid dream. Or a hallucination. The Nobel prize winning chemist and LSD tripper Kary Mullis writes in his 1998 autobiography that he once saw a glowing, green talking raccoon. When looking for the truth, the rationalist advises, seeing is not believing.

However, although rationalists generally believe that experience is a poor guide to the external world—to whether there is a piece of paper in front of you or to whether there is a talking green raccoon in your backyard—most rationalists think that when it comes to learning about the internal world of the conscious mind, that is, when it comes to learning about how things seem to you in contrast to how they really are, experience's precepts reign supreme. And with this, contemporary philosophers generally agree: having an experience at least teaches us

what it is like to have an experience of that sort. If you want to understand what it is like for someone to see a talking green racoon, one experience—whether LSD induced or not—is infinitely more revealing than a thousand words. One experience, it is thought, gives you something those thousand words cannot: it teaches you what it is like to have that kind of experience.

Consider a thought experiment conceived of by the contemporary philosopher Frank Jackson. Imagine having spent your entire life in a black and white room—the walls of the room, the objects in the room, even your flesh and blood all appear to you on the grey scale. Imagine further that inside this room you have dedicated yourself to learning about color. (Perhaps you are motivated by that common human tendency to want what you can't have.) You read about the science of color in books lacking color pictures and watch video lectures about color on a black-and white screen; you learn about surface reflectance properties of objects, wavelengths of light, the neurophysiology of color vision; you learn, that yellow is the color of an old goat's eyes and the evening sky lavender blue. You learn all this and more. Is there anything you don't know about the experience of seeing color? Is there something you would learn by venturing outside of your black and white room?

It has seemed obvious to many philosophers and non-philosophers alike that the answer to this question is “yes.” If you want to learn what a new experience is like, such as the experience of seeing red for the first time, you can do so by having that very experience. This is the point made by the twentieth century philosopher David Lewis in his paper “What Experience Teaches,” and it is echoed by L.A. Paul in her 2015 book, *Transformative Experience*: “stories, testimony, and theories aren't enough to teach you what it is like to have truly new types of experiences—you learn what it is like by actually having an experience of that type.” The nature of sensory experience is the one thing for which experience itself is supposed to be the master teacher. Or in Lewis's words, “if you want to know what some new and different experience is like, you can learn it by going out and really having that experience.”

The pedagogical efficacy of experience, however, is exactly what the hushed-up topic of labor pains throws into question. If learning means being able to retain the information you were taught, as both Lewis and Paul think it does, you don't learn what a new type of pain is like by going out and having it. With respect to understanding the experience of labor pains, going out and really having them leaves you no wiser than someone who has never had them at all. The experience doesn't teach you what the experience is like because, no matter how frequent or lengthy your lessons, the memory of the feeling vanishes. Those who have never been there can't know what it's like. But the thing is, neither can those who have.

Labor pain, I've heard it said, is unique since remembering it would dissuade women from having multiple children. And so, according to this line of thought, just as evolutionary pressures have led women to have hips wide enough for childbirth, such pressures have also led women to forget the pain of the process that leads up to it. In both instances, it is thought, women with these traits have a selective advantage.

But although this picture might help explain the structure of the female pelvis, I'm not convinced that it makes sense of labor-pain amnesia. Presumably, it is relatively recent in our phylogenetic past that women have been able to control the timing of pregnancy. Indeed, it is likely that early humans didn't even understand the connection between sex and pregnancy. Our long gestation period combined with the fact that not all acts of copulation led to pregnancy made the issue far from transparent. Thus, given the rate of evolutionary change, it seems

unlikely that there was enough time for such amnesia to spread through the entire human population.

To be sure, it is an interesting and open question when, exactly, humans became aware of connection between sex and pregnancy. The advent of animal breeding during the Neolithic Period suggests that the connection was known around 20,000 years ago. And it may have been understood before that. However, the further back we go, the more unlikely this gets. And for an adaptation of this scale to take place—for I assuming that I'm far from an aberration in my inability to remember labor pain—we would need to go a long way back. Local, transient evolutionary changes can occur very quickly, even over a period of a few generations. But lasting, widespread evolutionary changes are thought to take their sweet time. Indeed, according to according to a 2011 study carried out by zoologist Josef Uyeda and colleagues, for an adaptation to spread throughout a species, it takes one million years. That's too long ago, I would guess, for our ancestors to have known about the birds and the bees.

Of course, one does not need to understand the connection between sex and pregnancy to prevent childbirth. Perhaps our early female ancestors who remembered the actual sensory misery of labor pains would have tried to terminate their pregnancies after they knew that they were pregnant. As I have no recollection of what the pain was like, I cannot say whether a memory of it would drive one to such extremes. But, if it would have, our adaptations that make it difficult to end a pregnancy—the extra padding and the instinct for self-preservation, for example—may have already been in place.

All this is highly speculative. However, even putting aside the question of whether women who remembered the sensation of labor pains were less likely to reproduce, there is still reason to doubt that labor-pain amnesia evolved because of its specific selective advantage. For labor pains are not the only pains that fail to leave a memory trace. No pains do.

Think back to the last time you stubbed your toe or hit your forearm on the lane dividers while swimming the backstroke, to name two minor boo-boos from my recent past. You might be able to describe the situation in which the mishap occurred, and you may be able to recall the expletives that came out of your mouth when it did; you might even be able to describe the sensation as sharp or throbbing, especially if that is how you thought of it at the time of its occurrence. But you won't be able to remember the feeling of the sensation. You may know to avoid such actions in the future. Yet you'll know this not because you remember the ache, but because you remember that those types of actions lead to aches. You might even automatically avoid such actions in the future. But this isn't because you are able to willfully summon up the actual feeling you had; attempts to remember that lead nowhere.

The experience of temperature seems to leave a similarly ephemeral memory trace. As I write this, it is early spring and in New York City. And, as is typical of early spring in New York City, it's still bitter cold outside. Yet in the department stores, all you see in Women's clothing are sleeveless, backless, weightless and whatever-else-less-there-can-be dresses in pink, yellow and chartreuse. Who feels like buying that now? Not me because I just can't believe that I'll ever feel inspired again to go backless. I can't believe it because I can't conjure up the feeling of being hot on those scorching summer days in the past. True enough, I might buy anyway (and placement of seasonal clothing in stores is in part based on an analysis of consumer trends that shows that people do buy anyway). But I do so because I reason inductively from the fact that in the past when the thermometer rose, I couldn't wait to shed those layers. (Compulsive consumerism may play a role as well, but let's ignore that.) Unless I'm in an overheated store, such reasoning doesn't rely on my knowledge of the feeling of being hot; that I lack entirely.

Or think about the last time you were shoveling snow after a storm. You may remember that the cold pierced through you, right to the bone. But what *that* felt like, you have no idea. It's not just the pain of childbirth that can't be recalled. Going out and really having the experience of any type of pain or extreme temperature does not teach you what these experiences are like. Even if you spent an entire winter clearing my mother-in-law's driveway in Maine, she'd be very grateful, but you still wouldn't know.

Visual and auditory experiences may be different. The memory of these seems to have sticking power. I remember what my obstetrician looked like; I remember the sound of her voice, perhaps even the sound of her hum. If you want to know what she looks like, I could save quite a bit of time by showing you a photo rather than explaining it. With one look, you'll see, and, after perhaps a bit of practice, you'll remember. This may help explain the why Frank Jackson's thought experiment is formulated in terms of vision rather than pain. With vision, experience is instructive. Pain, however—whether it is the pain of childbirth or the pain from temperature extremes—is different. In terms of what you learn by having pain, you could have done just as well with those thousand words.

That I have no memory of the feeling of pain seems abundantly clear to me. However, scientific investigations into whether pain leaves a consciously accessible memory trace have led to divergent conclusions. Although some studies purport to show that subjects have extremely poor or nonexistent memories of painful sensations, others conclude that subjects' memories of such sensations are quite accurate. Why is this? I don't know, but—as is my wont—I do have a hypothesis. Experiments carried out by the psychologist Rohini Terry and colleagues show that patients who have undergone vascular surgery generally describe their post-operative pain in the same terms as those that haven't had the surgery yet were given a brief description of the resulting pain. This suggests that whether or not you have experienced a pain, you'll describe it in a similar way. Yet, when you describe a pain you haven't experienced, you aren't remembering it. And in looking at research subjects' reports, this difference between reports of memories that reflect a sensory experience and those that reflect merely the memory that the sensation was sharp will be elusive. Terry and colleagues come to a similar conclusion: “The findings of this study confirm the need to investigate the different states of awareness—or phenomenal characteristics—associated with pain recall to further our understanding of memory for pain.”

Where my analysis differs from Terry and her colleagues' is in what we see as the different states of awareness. The doyen of memory studies, Endel Tulving, emphasized the importance of distinguishing memory and knowledge. For example, if you were born after 2002, you might know about the 9/11 attacks, but you can't remember them. Employing this remember-know paradigm, Terry and her colleagues hypothesize that the divergent conclusions reached by memory researchers as to the nature of remembered pain results from researchers failing to properly distinguish memory and knowledge. However, although it is clearly important to distinguish memory from knowledge when studying pain memory, I think that a failure to make this distinction does not account for the divergent results in the studies on pain-memory what is at issue. It is not that I simply know that labor pain was dreadful. I remember that it was. What I don't remember is the sensory component of it.

Part of the problem here is that we lack the terminology needed to talk about the type of memory that, as I'm suggesting, we have with respect to seeing colors, yet lack with respect to pain. I can always tell that something is askew when I find myself needing to say “itself” over

and over again: “I can’t conjure up the sensory experience itself,” “I can’t remember the pain itself,” and so on. This is not merely a stylistic nightmare. It’s that, but it’s more as well since the mere lack of terminology may very well lead to confusion when we try to think about the nature of pain memory. Indeed, if I were bold—which I’m not, but I’ll say it anyway—I would venture that having an appropriate term for the “remembered sensation of pain itself” would help researchers better pinpoint the phenomenon under investigation. We therefore need a word to describe this form of memory. But what should it be?

The classification of kinds of memory is part art, part science. “In the old days,” according to Tulving, “there was only one kind of memory.” But things have changed, and psychologists now distinguish long-term memory from short-term memory, declarative memory from non-declarative, episodic versus procedural, and so forth. Missing from their categorization, however, is the type of memory that I am claiming we have with color, though not with pain. Missing from their categorization is what one might naturally want to call “sensory memory,” if that phrase weren’t already taken. “Sensory memory,” in these new days of myriad forms of memory, refers to the type of extremely short-term memory, lasting no longer than half a second, that sews momentary perceptions together and allows us to perceive the world in a connected whole. And as the phrase, “long-term sensory memory,” would be oxymoronic, we’ll need to try something else. I propose, “qualitative memory.” I have long-term qualitative memories of visual, auditory and, I’m pretty sure, olfactory experiences. Yet with pain, all my long-term memories are non-qualitative.

And now—without all those “itselfs”—I can say what I’ve been wanting to say: when investigating the memory of pain, we should aim to distinguish reports of qualitative memories from nonqualitative ones, for if I’m right, experience doesn’t leave you with qualitative, memories of pain; it doesn’t teach you about what is sometimes refer to the “qualia” of pain. Philosophical wisdom has it that, barring brain surgery and magic, qualia is the one thing you need to and can learn through experience. But, if what I’ve said so far is right, when it comes to pain-qualia, philosophical wisdom falls short. But, if what I’ve said so far is right, when it comes to pain-qualia, philosophical wisdom falls short.

Plato refers to memory as “the mother of all muses,” and tells us that it is imprinted in our soul by our perceptions and thoughts like a block of wax is imprinted with a seal. Furthermore, just as a feather falling on hard wax would leave no mark, there are some things, according to Plato, that are not recorded. What these are, he doesn’t say. However, in describing memory, he explains that it is formed by what we “see or hear or think of in our own minds.” Thus, Plato, too, may very well have been aware that pain, unlike visual and auditory experiences, fails to make a stamp.

Yet might pain make an imprint that is not accessible? Plato also thought that some memories are locked in us so tightly that we are unaware of them unless probing questions—the sort of questions we now refer to as composing the “Socratic method”—bring them to the surface. Pain, however, doesn’t seem like that. Ask me as many questions as you like about those dreadful days of labor (yes, it lasted days), and the qualitative memory of it is still not revealed. Bring Socrates himself back from the grave and let him question me. Or better yet, though Plato referred to Socrates as a “midwife” for ideas, bring back Socrates’ mother, Phaenarete, who actually was a midwife and thus presumably knew something about labor. Let her put me through the Socratic wringer. Still, no memories of how it felt will get squeezed out.

Psychoanalysis would do no better.

However, some memories stored away in the recesses of our brain may be pried away by other means. In his novel *In Search of Lost Time*, Marcel Proust describes what he refers to as “involuntary memories,” the most well-known example being that of how the taste of cookie-crumble infused tea sparks, in the narrator of the book, a memory of his childhood. Involuntary memories, Proust thought, were somehow able to capture the essence of the past; willful recollection never did this. And thus, the question arises as to whether involuntary memories are capable of delivering qualia in a way that voluntary memories are not.

In contrast to Proust’s memories, which were all life-affirming, memory of pain—even when it leads to the birth of one on those little lives—is just the opposite. This might not bar it from being involuntarily remembered. For example, it is thought that unpleasant memories can be prompted through what psychologists refer to as “aversion therapy,” whereby an association is set up between a disagreeable sense experience and a behavior that one wants to avoid. Aversion therapy is exemplified in Anthony Burgess’s 1962 dystopian novel, *A Clockwork Orange*, and later popularized in a film adaptation. In the novel, in an attempt to cure the central character, Alex, of his “ultra-violent” tendencies, researchers force him to watch graphically violent movie scenes while under the influence of a drug that produces extreme nausea. The therapy has the intended effect—at least temporarily—but it also has an unintended one. As the soundtrack to the scenes that Alex was made to watch was Beethoven’s ninth, he also ends up unable to listen to that music without feeling ill. One way to think of this is that the therapy made the music trigger an involuntary qualitative memory of nausea.

According to research by Timothy Solomons, post traumatic shock may work on similar principles. In a 2004 study, Solomons and colleagues investigated post traumatic shock in patients who regain consciousness while under general anesthesia yet, because they have been rendered immobile, are unable to alert the doctors of their plight. What Solomon’s research concludes is that these patients frequently “re-live” the pain that they felt during the operation. If anything is worse than labor pain, it must be this.

During my labor experience, I inadvertently put myself through a kind of aversion therapy that was not entirely different from Alex’s. Alex was smarter: when he realized that he was developing an aversion to his favorite music, he begged to stop the therapy. I didn’t make the connection. At the Elizabeth Seton Childbirth Center, which specialized in natural births, I was advised, among other things, to avoid analgesics at all costs and to listen to music during labor. Music had the power, we Setonites believed, to assuage the pain. So I listened to Tracy Chapman through all the contractions. The result: any time I hear “Baby Can I Hold You,”—which, unfortunately, seems to be on the Whole Foods’ playlist—I burst into tears. And these are not tears of joy over the miracle of having brought a human being into the world.

Does the music cause a qualitative memory of the pain? Or do the tears result from remembering, in a non-qualitative way, how painful it was? Introspection doesn’t tell me this—it’s hard to introspect when you’re crying. Can post-traumatic shock trigger qualitative memories of pain? Or does it only make one remember, in a non-qualitative way, that one was in horrible pain. I’d love to know the answers to these questions, but even if qualitative pain memories can be provoked, the original experience of the pain would still seem to be a poor teacher. What use is knowledge that you can summon only involuntary? If you tell your professor that you would have known the dates of all the important battles of the American Revolution, if only she had blasted Deaf Leopard through the sound system, you still will have failed the test. And in any case, most of our experiences of pain do not occur in conjunction with another sensory instigator

that might spark our recall. Most of our experiences of pain—the qualitative component of it, the “what it’s like”—simply, to use another Proustian phrase, “fade to oblivion.”

What does this say about us as human beings? Is there any larger significance? I’m not sure if there is, but I think there might be. And if there is, it would have to do with place of empathy in moral reasoning.

The eighteenth century “moral sentimentalists,” such as David Hume and Adam Smith, held that all our ethical behavior is grounded in what we now refer to as empathy, a feeling, according to Hume, which enables us to “actually experience the passion” of another person and to “feel pleasure because they are pleased.” We are able to do this, according to Hume, only because of our shared background. We understand others and have compassion for them, Hume thought, only if we have walked in their shoes. And, since he also held that “all human beings . . . are similar in bodily structure and in the types of passions they possess,” our ability to have compassion for others has no limits.

In the twenty-first century, the world no longer appears so uniform. Indeed, according to L.A. Paul, “humans vary so much and so deeply, that even small differences. . . in experiences between people can prevent us from knowing what it is like to be a different type of person.” On the Humean view that empathy requires similarity between people, this could restrict the scope of our empathy. And if morality requires empathy, then our ability to act morally, in the twenty-first century at least, appears to be compromised.

But not all philosophers think that empathy is a pre-cursor for ethical behavior. For example, the contemporary philosopher Jesse Prinz argues that feelings of empathy are not sufficient to motivate the type of ethical behavior that is required of us. Empathy, for example, is directed towards another individual, yet, according to Prinz, some of today’s greatest problems concern entire populations. Moreover, empathy might sometimes get in the way of virtue. When truly feeling another’s pain, Prinz points out, you will likewise feel miserable. Yet how much help will you be to those in need then? And, finally, Prinz explains, empathy is itself less motivating than other emotions. Anger, though we hate to admit it, can really stoke our engines, and when it’s anger at injustice, we might actually abandon our slacktivism and take action. Thus, even if empathy require that elusive similarity with others, it seems a rather insubstantial basis for moral responsibility.

Beyond this, the hushed-up topic of labor pain-amnesia suggests that in cases where someone is suffering from physical pain—situations that certainly call for our compassion—empathy is not even possible. You can’t “actually experience the passion” of a birthing-mother even if you’ve been there yourself because you can’t remember the feeling. Thus, you won’t have empathy. Yet, along with Prinz, I think that our decisions to act ethically in the world need not depend on it. We can offer assistance, be compassionate and show that we care even if we have no idea what it is like to experience that feeling of pain. People who have undergone similar experiences do not sit upon a privileged moral throne. There are no excuses: whether you know what it is like or not, you can still do what is right.

As his biographer James Boswell explained it, the writer Samuel Johnson had a similar take on things. After Boswell confessed to having what he believed was “not so much feeling for the distress of others, as some people have, or pretend to have,” yet, at the same time, to know that he would do everything possible to relive someone who was suffering, Johnson replied: “Sir it is affectation to pretend to feel the distress of others, as much as they do themselves. . . [or] to

feel as much pain while a friend's leg is cutting off, as he does. No Sir; you have expressed the rational and just nature of sympathy.”

Johnson doesn't think we feel as others do when they suffer. And if I'm right about pain-amnesia, even if we've had the same sorts of experiences as others who have suffered, we won't know what their suffering is like. But this is no impediment to acting in ethically commendable ways. As Johnson said, upon being told of the death of a child: “I would have gone to the extremity of the earth to have preserved this boy.”

And this is something that I would be happy to share with my kids.