



TRACES OF THE TRINITY

Signs of God in Creation and
Human Experience

Peter J. Leithart



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To Elliot Paige Leithart

While *Traces of the Trinity* was going through the editorial process, my son Sheffield and his wife, Laura, opened their home to their first child, a daughter, Elliot Paige. I complete the book with the prayer that the Spirit of Jesus will forever make his home in Elliot, as he already has, and that she will find a permanent dwelling place in Jesus her Lord. May the Spirit enlarge her, so she will be capacious for her parents, for her future siblings and spouse and children, and for many, many friends. Elliot and I have not yet met, but I trust that the Spirit is already preparing a place in her heart for me, as he has made room in my heart for her.



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Preface

Godly speculation can have an edifying function.

—JOHN FRAME

This is a book of theological speculation. The particular form of speculation has a long pedigree in Christian theology, present in seminal form already in Augustine and the Cappadocians and developed through the centuries under the heading of *vestigia Trinitatis*, which might be translated as “traces of the Trinity.” The aim is to discover and lay bare echoes, vestiges, traces, clues to trinitarian life within the creation.¹ This tradition has fallen on hard times in some circles of late, for reasons I explore briefly in the postscript. I think that unfortunate, and hope that this essay will contribute to a revival of this neglected area of theological speculation.

My goal is, more specifically, to point to the traces of what theologians call “perichoresis” in creation and in human experience. Perichoresis means “mutual indwelling,” or “reciprocal penetration,” and describes the exhaustive mutual indwelling of the persons of the Trinity, the mystery of the Father’s being in

the Son that is eternally simultaneous with the Son's indwelling of the Father, and their mutual dwelling in the Spirit.

What I offer is not *doctrinal* speculation. Nothing I say here violates any point of trinitarian dogma, and, unlike some other writers who have written on perichoresis,² I make no suggestions for "revising" or "enhancing," much less for "correcting," trinitarian orthodoxy. I'm not opposed in principle to such efforts. We still have much to learn about the Triune God from Scripture. But that is not my aim in this essay. Instead of doctrinal speculation, I seek to extend trinitarian categories and patterns of thought to creation. This is an exercise in trinitarian "worldview."

The traces I discuss are of different kinds. Sometimes (as in chapters 1, 3, 6, and 7), I describe concrete physical traces of perichoresis. At other times, the mutual indwelling is more psychological or emotional (chapter 2), and at still other times it is conceptual (chapters 4, 5, and 8). In many chapters, I move from one mode to another, from physical to psychological to conceptual and back. I realize that some of the analogies I examine are clearer and more convincing than others. I realize too that I have not written an exhaustive study of the perichoretic features of creation. My speculations are suggestive, not definitive. In fact, my aim is not first of all to convince the readers of my specific conclusions, though I would like to do that. My first aim is to shape the way my readers think about and respond to the world around them, even to re-form the shape of their thought. I want to convince readers who are used to thinking in straight lines and sharp angles of the virtues of thinking in chiasms, spirals, curves, coils, twists, swirls, and whorls. If I do no more than leave my readers in a state of enhanced alertness, if I leave them anticipating that traces of triune life will meet them under every stone and in every sunset and in the face of every stranger, I will be satisfied.

The organization of the book requires a brief explanation. In form, it might be mistaken for a piece of natural theology,

a nontheological foundation for revealed theology. For eight chapters I talk about creation—the relation of human beings to the world and to one another, sex, time, language, music, ethics, and logic—and finally, in the ninth chapter, I come to talk about the Trinity. The book seems to use the notion of *vestigia Trinitatis* in just the way Barth forbade: it might appear that I claim to arrive at trinitarian conclusions without having to go to the trouble of believing the gospel or reading Scripture.

The reality is the opposite. My starting point is the biblical and redemptive-historical revelation of the Trinity, along with the dogmatic and doctrinal tradition of trinitarian theology, and, assisted by a number of recent theologians,³ I attempt to discern how trinitarian theology illuminates the world we live in. My opening assumption is simple-minded: Christians believe that the Triune God created the world, and that should have *some* implications for the kind of world that it is. Many Christians have acknowledged the perichoretic shape of the life of the Trinity, and that in particular should leave some trace in the world that has been made and remade by the Father, Son, and Spirit. Instead of working up to the Trinity from creation, this book looks *through* the doctrine of the Trinity to see if it illumines the way the world is. I believe it does, and I hope the results are edifying.

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Outside In, Inside Out

Glance around the place where you are reading. What's there? Many things, I expect—unless, perchance, you're reading this in an empty, white (padded?) room, which I hope you aren't.

Surrounding *me* are computer, desk, lamp, printer, unkempt piles of books, a loveseat and an old rocker, and the recliner to which I will shortly repair for a well-deserved afternoon nap. I hear my daughter practicing piano in the next room and the exhausted huffing and puffing of my nearly dead space heater. I smell the dust I stirred up packing boxes earlier today, and I can feel the keyboard and desktop and taste the bitter black coffee that is life's elixir.

And at the center of everything is the thing I experience most immediately: me. Me doing the viewing and the hearing and the smelling and the tasting and the touching and the typing. Me also presumably doing whatever thinking is going into this

paragraph, and the previous one and the next. To other people, I'm one of the outside things, just as they are outside things to me.

When my daughter enters the room to ask if she can invite her friend over, she joins the table and the floor and the coffee mugs I keep for students as one more object in the room. My daughter is a different *sort* of object from the others. I have to drink a lot of coffee before my mug asks if he can ask *his* friend over. It might feel like my recliner is hugging me as I drift off to sleep, but that's just overactive imagination or overconsumption of coffee. My daughter, though, she hugs me, though not always voluntarily.

It's a complicated world, stuffed with stuff, but we find it easy to simplify, to whittle down the welter of bloomin' buzzin' confusion to two patches on the map: Outside there's the world with its things and its beauties with their aromas and sounds and tastes. Inside is me, my mind, the sensing thinking feeling thing. There's the world of objects, and there's me the subject, my skin forming a clear boundary between the two. It's Me versus World.

A skeptic might say that this seems easy only because I have been schooled in the misleading metaphysics of modernity. Only since René Descartes, one might say, have people chopped up the world this way. Descartes lived in a time of religious conflict. For centuries before, the Catholic Church had so dominated the intellectual and imaginative life of Europe that Christianity was all but taken for granted. In Descartes's day, one could no longer accept what the church said because now you had to ask the question, *Which* church? Some were beginning to say, None of them! But what then? Perhaps we can never know the truth about anything. Descartes didn't like the prospect of being doomed to ignorance, but if he wanted certainty—which he certainly did—he had to bypass religion and find a back way in.

The back door to certainty was labeled "Doubt." Descartes doubted the existence of the objects that surrounded him, the

waxy candle burning away in his darkening room, his memories of the past, the traditions he had inherited. After all, he could not be absolutely certain that his experience of seeing the candle was real. We have all heard things that weren't there, seen things that turned out to be mirages, and René Descartes had had those sorts of experiences too. He might be dreaming. Or his experience might be the work of a very clever, very powerful demon, who had snuck into the room to derail the course of modern philosophy before it began. One cannot be too careful.

But when it was all whittled away, when he had cut away all the doubtful chaff from what was there, he could still be certain of one thing: *himself*. Suppose he's dreaming—but *he's* doing the dreaming. Suppose he is deceived—but *he* must exist to be deceived if he is being deceived. Even the evil demon's deceptions could be turned into proofs of his own existence.

But Descartes wanted to be more specific. The “me” that he discovered inside had a particular form and character. The only thing he knew for certain was that the “me” that was dreaming or being deceived or doubting was *thinking*. The thing he discovered, the thing he knew with absolute certainty, was that there existed in him a thinking thing. The world outside Descartes, including his own body, was a material machine, objects made of inert atoms, chugging along according to predictable, scientific laws. Inside was a thinking thing. It was subject versus object, René versus the World. One philosopher, Gilbert Ryle, unkindly called it the “ghost in the machine.”

Cogito, ergo sum, Descartes cried. The stars flickered, the seas shifted restlessly, and the gears of the universe groaned as the world became modern.

Well, maybe not quite like that, but Descartes *did* open up a new way of thinking about the world and the self, about the inside me and the world of objects outside me. He created a modern version of “mind-body dualism.” He imagined a world, the skeptic would say, in which it was natural to think of the

world of objects out there and me in here. This picture has come to be so obvious to us that it's hard to conceive of anything else.

I have some sympathy with the skeptic, for reasons I will explore below. Still, you *can*, if you like, divide everything into you-and-everything-else. Even when my daughter hugs me tightly, she is still herself. When I drift to sleep in my favorite chair, chair and man don't become a single blended entity, call it a "chan" or a "mair." My digestive system is a machine for turning coffee into alert parts of me, but while it's waiting in the cup or slipping down my throat the coffee is coffee. Things are different, irreducibly so. Nothing is other than itself.

Once you've made those distinctions, though, you've understood at best half of the pattern of things, and arguably it's not the most interesting half. The world is divided into things, but those things group together in all sorts of ways, forming complex patterns and shifting networks and intricate relationships with one another. I own my chair. I look at it fondly, even longingly, as the afternoon wears wearily on. Sometimes I sit in my chair, sometimes leaning back for that well-deserved nap I mentioned earlier. I have economic, physical, emotional, and other sorts of attachments to my chair—and even more so to my daughter.

I am different from the things around me, yet I'm also inseparably intertwined with them. The world isn't just outside; it's also inside. I'm not only outside the rest of the world; I'm in it. My connection with the world is a Celtic knot. Inside and outside form a Möbius strip that folds back on itself.

That may sound strange and mystical, but it's not hard to see. Let's start simply. Consider the obvious fact that you have a body. Descartes knew he had a body, but he believed his body was part of the external world that lay outside his real self, his thinking mind.¹ His body was the closest bit of that extension he called space. It was the machine nearest to his mind.

But this doesn't describe how we actually experience our bodies. If my hand got mangled in an industrial accident, it

would be absurd for me to tell sympathetic friends, “Oh, it’s fine. After all, the accident only happened to my *hand*, not to *me*.” If I said that, my friends would wonder if my brain had also gotten mangled in the process. What the apostle Paul said about the church as the body of Christ is a truism for all bodies: when one member suffers, all suffer; when one member rejoices, all rejoice. Each member is a member for and of the whole. You can’t detach one part of you from the other and identify one or the other as the “real me.” We are mind-body unities, and my body is as much me as my mind is. Pain would be concentrated in my hand, but my entire body, including of course my brain, would be entirely involved in the event.

Once we recognize that—and we have to be trained *not* to recognize it—we can see that we aren’t sitting outside the world peering in. We *inhabit* the world. Since we have bodies and *are* bodies, we occupy space in the world. We bump into things, rest our elbows on the table, tap on the keyboard with our fingers. The world bumps us back, taps us in turn, and our life takes shape in the sometimes clumsy dance that goes on between me and my environment. The French philosopher Maurice Merleau-Ponty put it well: “The body is the vehicle of being in the world, and to have a body is, for a living creature, to be involved in a definite environment, to identify oneself with certain projects and be continually committed to them.”²

This isn’t just about our bodies and their actions either. Merleau-Ponty got it right again: “Truth does not ‘inhabit’ only the ‘inner man.’” Truth inhabits the body too. Then Merleau-Ponty went on, more radically, to say, “more accurately, there is no inner man” because “man is in the world, and only in the world does he know himself.”³

You are in the world. *You* are in the world, not merely some heavy attachment called “body.” The window we’re trying to peer through is opaque, but a beam of light is shining through. It’s enough to keep us going.

Not only are you in the world, but there is also a continuous interchange between your body and the world. The skin that seems to be such a clear boundary between inside and outside is permeable. Human beings have about five million hairs, each of them with a pore. As late as the 1960s, many believed that oxygen exchanges take place through our pores, that we inhale and exhale through the skin, and if our skin gets blocked, we suffocate. In Ian Fleming's *Goldfinger*, an unfortunate girl suffocates when she is painted head to foot in gold. The filmmakers, intent on keeping their actress alive (for publicity reasons, perhaps), left a patch of her skin exposed so that oxygen exchanges could continue.

Oxygen exchanges through the skin are a myth, but some creatures do breathe through their skin—some species of earthworms and some amphibians. Even one mammal, the marsupial mouse, takes in oxygen through its pores. If air doesn't enter their skin, if air doesn't exit later, they will die. So, a warning: don't paint a marsupial mouse with gold paint.

Our pores need to be kept open too, though not for oxygen exchanges. If our skin is blocked, we break out with pimples and blackheads, and that can be mighty unpleasant. Much to our embarrassment, and to the delight of antiperspirant and cosmetic manufacturers, icky sticky often stinky stuff oozes out of us all the time. But that sweat keeps us alive. People suffering from anhidrosis don't have the automatic body-coolant mechanism the rest of us have, and they are at greater risk of dying from heat exhaustion.

Our skin has pores; it is porous. Because it is, so are we.

You have to look closely to see your pores, but our bodies are pocked with larger holes, just as essential to life. You might have noticed. If not, take a look in the mirror and count the holes in your head alone, and then work your way modestly down your body. You'll find a couple more holes lower down. The upper holes let outside things inside. The lower holes force what's

inside back outside. We are porous because we have gigantic pores that we call mouth, nostrils, ears, eyes, urethra, and anus. Roughly half of us humans have vaginas that open up into a uterus, everyone's first home.

We can live with our skin pores covered, but we cannot live if our giant holes get blocked. We breathe seven to eight liters of air per minute, which amounts to about four hundred cubic feet a day, 550 liters being oxygen. That's a lot of the outside to welcome in every day, but it needs to be done. Cut off the flow of oxygen from outside into your lungs for more than a few minutes, and you die.

Americans drink around a gallon of water a day, half from drinks other than water and about one-fifth from the food we eat. We can survive longer without water than without oxygen—about five days—but when we're deprived of water, our cells lose fluids that are necessary for the cells to function properly. We need water to have bodies at all, since more than half of our body weight is water. For infants just from the womb, the proportion is even higher, close to three-quarters of the baby's weight. Without water, we die.

And of course we need food. Food comes in all enticing styles and delectable flavors. It's far more than fuel, but it is fuel. Mahatma Gandhi reportedly survived twenty-one days without food and with only a few sips of water.⁴ Hunger strikes have gone on longer, up to forty days. At Mount Sinai, Moses fasted forty days, as did Jesus in the wilderness at the beginning of his ministry. Most of us have trouble functioning well more than a few hours without a meal. Women need about 2,000 calories a day. Men have it better: nutritionists recommend a daily intake of 2,500 calories for bulkier males.

Once we've eaten food and our digestive system has squeezed all the nutrients from it, we need to return the remainder to the world through our anus. A few years ago, Elvis Presley's physician, George Nichopoulos, revealed that the King might

have died of chronic constipation. At death, his colon was twice its normal diameter and twice its normal length. An autopsy revealed that the stool in his intestines had been there for four or five months when he died. If a human doesn't have a bowel movement in a week, it can lead to sepsis and death. Urine has to be expelled more regularly. It is sometimes possible to go a day and a half without urinating, but if the bladder gets too full and is not emptied, the urine backs up into the kidneys, and this can have serious health results.

We humans don't live long unless the world goes in and out on a regular—momentary, daily—basis. We don't live *well* unless other things enter through our pores. What would life be without Beethoven's *String Quartets* or Handel's *Messiah*? What would life be if you could never hear the voice of your mother, your lover, your spouse, your toddler? Impoverished for sure, even dangerous: if you were deaf, you couldn't hear the elephant crashing toward you through the bush, the burglar sneaking into the house in the dead of night, the ominous footsteps behind you in a dark street. Those transporting, and welcoming, and warning sounds enter our bodies by vibrating the air until it reaches our eardrum. If the vibrating world didn't come into us from outside, we'd live in a world of utter silence.

And utter darkness. According to the current theory of vision,⁵ light rays bounce off the things outside us and enter our eyes through the cornea, which refracts the rays through the pupil. Controlled by the iris, the light passes to the lens, which flexes and bends to focus the rays on the retina at the back of your eyeball. The rods and cones on your retina detect the colors of the light and the details of what you have seen, and the cells of the retina turn the light into electrical impulses that are sent along the optic nerve to the brain, where an image is somehow produced. The process seems instantaneous, and it fools us into forgetting that we are taking the world in every time we glance around us. Our ability to see depends on part

of the world—light, whatever that is—entering into our bodies and being transformed into the sort of impulses that our brains can “read.” Unless the world enters us, we’re blind.

Whenever I smell boxwoods, I am instantly transported back to my youth, exploring the cobbled streets and colonial homes of Williamsburg, Virginia, with my family. Smell is as physical as any of the other senses. Diane Ackerman notes,

When I hold a violet to my nose and inhale, odor molecules float back into the nasal cavity behind the bridge of the nose, where they are absorbed by the mucosa containing receptor cells bearing microscopic hairs called cilia. Five million of these cells fire impulses to the brain’s olfactory bulb or smell center. Such cells are unique to the nose. . . . The neurons in the nose are replaced about every thirty days and, unlike other neurons in the body, they stick right out and wave in the air current like anemones on a coral reef.⁶

What would life be like if you never smelled a rose, or your wife’s favorite perfume wafting across the room before you see her enter, or the warm musk of a child’s hair? Impoverished. But what would life be like if you didn’t smell the rancid butter or the sour milk, or the natural gas leaking into the room? Life might well be nasty, and might even be short. We need to smell, and we want to experience the pleasures of smell, but we won’t unless the world breaks through the shell of our outside into our inside.

We don’t live richly unless we take the outside world in, but this is not just a “quality of life” issue. The point is more fundamental. We don’t have any experience of living in the world *at all* unless the world lives in us. We know that we exist when sound waves on the air strike our inner ear, when our eyes receive light reflected from objects outside, when our noses receive the molecules that carry odor to those sensitive nerves. When we die and no longer take the world into ourselves, our corpses are

still lumps of flesh in the world. But lumps of flesh don't have any *experience* of existing in the world. To experience being in the world, the world has to enter.

Imagine yourself in a room without light and sound, and imagine that torturers have somehow also removed all aromas and tastes. Imagine too that you have lost all sense of touch, so that you can't feel the walls of your prison. It's a terrifying picture, because it's very close to death. Experience as such, experience as we know it, is experience of being in the world. If we eliminate all the inputs from the world, we wouldn't merely cease to experience the world. We'd stop experiencing. Even Helen Keller could feel the water trickling over her fingers and the vibrations of her teacher's vocal chords.

It's not only the stuff in the world that enters me as I interact with it. The arrangement of things in space and in places I enter also enters me. I don't experience individual objects individually, discretely. I experience them in ensembles—the lamp and computer on the desk; the window looking out over the computer screen; the houses of the neighborhood and, very very occasionally, a living, breathing neighbor; the trees down by the Cahaba River beyond the houses. But I can't inhabit this place unless the place also comes to inhabit me. Without that cohabitation, I have no experience of being in that place at all. Besides, I carry around the places of my past life in me, and they can capture me unbidden. New places that inhabit me evoke old places I used to inhabit. Out in the Alabama woods for a “winter” walk or passing the snowy woodlands around Chicago, I am thrown back into my past. I'm eleven again, crossing frozen Big Walnut Creek to climb the slippery, steep, tree-tangled hill on the far side.

Descartes notwithstanding, knowledge, including self-knowledge, doesn't come abubblin' up from within. If it does, it's likely to be false or at least limited. Even at the most elementary level, we learn by taking the world in. We discover that lilacs

are purple and aromatic because we see and smell them. But we don't know they're "aromatic" unless we've learned what that word means, and we learned that from another English-speaking person. As many have pointed out, Descartes himself couldn't forget everything. If he wanted to publish his theory—and he did—he had to remember Latin or French and how to write. He had to believe that the French or Latin he wrote would be understood by his readers. Doubt can only go so far.

No English speaker invented the English language, any more than Descartes invented the French and Latin in which he wrote his treatises. We entered into a world where the English language already existed, and I imagine that many of the readers of this book entered a world where parents and siblings already spoke English, and through a variety of different avenues we put two and two together, to distinguish *two* from *to* from *too*, and began to master English. This all comes to us from elsewhere. We didn't make it up in our heads. Any language we might be able to make up would be incapable of doing what languages do, which is to communicate with other people. Our teachers, our traditions, our learned habits and accumulated factoids and ideas are not obstacles to knowledge, as Descartes suggested. They are the very stuff of knowledge. Without them, we probably couldn't think at all, and we certainly couldn't converse or report or get feedback and correction.

We do produce ideas from within. We can take *this* and combine it with *that*, stir together this insight and that observation, mix this book and that event in creative ways. We can think logically through a series of axioms to arrive at reliable conclusions. All of these mental operations, though, depend on having our minds fat and healthy with nutrition from without. Our brains, like our mouths and bellies, feed on the world. Learning is feasting, a taking-in of the world so that it becomes us, coursing through our brains the way nutrients flow through our blood.

If we don't retain things we've learned, life will be a constant tumble. Every time we walk through the house, we'll bump into chairs and sofas whose location we've forgotten. Every time we meet someone, we'll have to be reintroduced. But forgetting is essential to a properly functioning mind too. If we remembered every last thing we had ever done or said, the weight of memory would be crushing. Some of our neurons actually enable us to forget, so that we can move on from what has happened.⁷ Our thoughts don't empty out into the world the way urine does, but many things that come into the mind leave the mind for parts unknown. The mind lives as much by a respiratory rhythm of inhalation and exhalation as our lungs. Our minds as well as our bodies have to excrete.

The world that surrounds us comes into us, so that we surround parts of it. What envelops us becomes enveloped by us. It's not René versus the Universe, Me versus the World. That apparently thick wall that separates subject from object, inside from outside, is full of passageways, and the two only exist as distinct realities because of exchanges across the boundary, only because the *out* comes *in* and the *in* goes *out*. I am in the world, and the world is in me, and I exist only because both are true.

Solid as they appear, the objects outside of me aren't any more self-enclosed than I am. Since the birth of modern physics and chemistry, we've known that most of the space of a "solid" object is empty. Ernest Rutherford discovered in 1909 that when he shot a beam of alpha rays at a sheet of gold foil, most of the rays simply went through the sheet, leading him to the then-revolutionary, now-elementary conclusion that objects are mostly empty space. Radiologists beam X-rays through your body and other objects. Objects are porous too.

And they're porous all the way down to the subatomic level. Atoms aren't what Newton believed they were, "solid, massy, hard, impenetrable, movable particles." They are more like "structures of activity, patterns of energetic vibration within

fields.”⁸ Things made up of porous atoms are themselves porous. Mass itself is not really massive either. According to the current model of particle physics, “The mass of a particle like an electron or proton is not inherent in the particle itself but depends on its interaction with a field called a Higgs field,” where the particles interact with theoretical Higgs bosons.⁹ As Karl Popper puts it, “Matter turns out to be highly packed energy, transformable into other forms of energy; and therefore something in the nature of a process.”¹⁰ Objects feel solid not because they are packed tight with protons and neutrons, but because of the electrical forces of protons and electrons. The electrons of a table repel the electrons of my hand with such force that I can’t push my hand through the empty space.¹¹

The world comes into me and makes me what I am, a living, experiencing person. But the effect goes the other direction too. I’m not in the world merely as an object on the outside of all other objects. When I’m around, my presence affects the world around me. Irreducibly distinct as I am, I am truly *in* the world. I indwell not only the environment in general but also specific objects in my environment.

Robert Hughes offers a charming example. Mice go about their business whether we perceive them or not. But when we are present, our sheer presence changes the way a mouse behaves. It remains a mouse, but it is a mouse in a particular mode because of my presence in the room. By the same token, if I happen to encounter the mouse, my experience and reaction to it will be colored by what I know about mice from previous encounters, storybooks I read as a child, what I think are the scientific facts about mice. Whether I bend down to stroke it with my index finger or leap onto a chair is determined by these personal factors. If the mouse were not in the room, I would neither bend down nor leap into the chair. My behavior depends on the presence of a small, cute—or scary—mammal in the room. As Hughes summarizes, “Reality . . . is interaction.”¹²

I'm not just an external object to the mouse. When I'm there, I change the mouse "on the inside."

Well, of course, we say: the mouse reacts to me because it's alive and it senses me in the same way I sense it.

But it's not only living things that are affected by me. Early in the twentieth century, physicists, those most rigorously mathematical and logical of the tribe of scientists, began to notice the disquieting fact that the presence of an observer affects the behavior of the things observed. Earlier scientists thought "they could formulate their science without any reference, even an implicit one, to the states of consciousness of observers," but they have come to recognize that "the principles of physics cannot even be formulated without referring . . . to the impressions—and thus the minds—of the observers."¹³ Those hard-looking objects out there are vulnerable to our presence and our observations.¹⁴

Descartes treated humans as detached spectators of the outside world. But unless we are philosophers, we don't have the luxury to be spectators. We don't first look over the world as a set of objects and patterns to analyze and classify. We engage the world as a set of objects that already have particular meanings and uses for us. The philosopher Martin Heidegger put it this way: The world is not "present at hand," waiting to be analyzed and thought about. It's "ready to hand," full of items that have their own shapes, purposes, uses, histories.¹⁵

Heidegger fancied himself a peasant, and a lot of his examples are homely, peasantish examples. A hammer isn't just a piece of wood with a shaped piece of metal at the top. It is more than its material qualities. It is a *tool*, useful for driving nails, not useful for sawing clean lines. The hammer is what it is because of how human beings use it. It is not an object "outside" of me; it's defined by the uses I make of it. It is "ready-to-hand," designed for me to use it. When I pick it up, it becomes an extension of me. When I'm using it, the hammer isn't an object "out there."

The offending, protruding nail is my enemy, and my hammer and I work together to defeat it.

We might think that we should distinguish between what the hammer is and what it is *to me*, but that doesn't work. If I've never seen a hammer before, if I don't know its proper use, if I pick it up and start to scratch my back with it, it's not merely that I don't know how to use the hammer properly. I don't even know what the thing *is* unless I know it as a hammer, as something to drive nails with. It's *not* a wood-and-metal thing; what it is in its "deepest essence" is what it is in its proper use, a hammer. And that means that I'm not just an observer of hammers, but I'm one of the beings that makes hammers be what hammers are. The thing *is* a hammer. That's its "essence," but it has that essence only because of human beings who make and use it. The hammer would not be a hammer—it would not be what it *is*—without us.

It's fairly easy to see that the boundary between me and the world is porous, and that it *has* to be so—physically, intellectually, metaphysically. It's a little harder to see that the pores open in both directions, that I make the world by dwelling in it as much as the world makes me by dwelling in me. It's even harder to see that objects in the world are what they are by indwelling *one another*. But that's the argument I want to make.

Go back to the beginning: Glance around the room. What's there? There's a collection of objects that can be distinguished from one another. The cup is not the coffee is not the table is not the lamp is not the computer screen. Yet together they form a little village of objects. Together they form an environment, and that environment determines what the objects are as much as the objects make up the environment. My cup is not the coffee, but if the cup never held coffee, and especially if it were *incapable* of holding coffee, it wouldn't be much of a coffee cup. The lamp is a lamp because it illumines the things I want to see on my desk. It's not the same as the things on my desk;

they don't mush together into an undifferentiated mass. But the lamp isn't much of a lamp without the other objects that it makes visible. The window in front of me is a window because of its particular properties—it's made of transparent glass and has metal and plastic frames to hold the glass in place. But it wouldn't be a window without the rest of the house. To be a window, it needs the wall and the light that passes through the window. The wall isn't the window, nor is the light, but without the wall and light, the window would not be a window.¹⁶

Things are defined not only in themselves but also by their relations with other things. One thing enters into the definition of another thing: "coffee" co-defines "coffee cup," and "wall and house" co-define "window." Things are so intimately "in" each other that you can't even describe the substance of one without reference to the others. Object defines object. Even while they remain irreducibly different, objects are what they are only because they exist in networks of relation to each other, so that one thing "curls back" to make another thing what it is. Things indwell things, and without this indwelling, nothing can be the particular thing it is. Nothing is other than what it is, but nothing is what it is except by the other things that dwell in it, the other things among which it dwells.