

Chapter 14

Prayer as a metacognitive activity

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“Prayer [is] only attention in its pure form.”

Simone Weil (2002 [1952])

Introduction

Why do we pray? For we do pray. At least most humans do. Roughly three out of every five Americans says that he or she prays every day and over 90% say that they pray sometimes (General Social Survey, 2010). Prayer of some form is central to all religious traditions. People address their gods directly and repeatedly with requests for things they want. They pray about health, they pray about warfare, they pray about sports games, they pray about parking.

It is tempting to take this basic request-for-an-outcome structure of prayer at face value, and to understand prayer as part of the complex human exchange that makes human sociality. We give pigs to the ancestors just as we give birthday gifts to our friends, just as bracelets are given in return for necklaces around the great kula ring, just as the texture of all human groups is created through small, repeated reciprocities of grain-threshing and dinner parties. We give prayers to the gods, and they give life to us. This was Robertson Smith’s deep insight: that sacrifice—“the central problem of ancient religion”¹—was a communal meal in which human and god created bonds of obligation.² Again and again, the psalms tell us that prayer and worship are a kind of reciprocity: we speak, and God replies; we worship and sacrifice, and He gives us rewards. “Surely goodness and mercy shall follow me all the days of my life, and I shall dwell in the house of the Lord forever” (Psalm 23:6).³ Thus likewise the New Testament:

¹ Admittedly, Robertson Smith was trying not to focus on an exchange system: he was trying to move beyond it, but it is hard to read him without assuming that this is what he was describing; and certainly those views were adopted by Tylor and Frazer. See Jones (1981).

² As Philip and Carol Zaleski comment in their broad history of prayer, “There is no prayer without some element of magic [and] there is no fully realized prayer without some element of sacrifice” (Zaleski & Zaleski, 2005, p. 60).

³ The quotation is taken from the English Standard Version of the Bible.

Now suppose one of your fathers is asked by his son for a fish; he will not give him a snake instead of a fish, will he? Or if he is asked for an egg, he will not give him a scorpion, will he? If you then, being evil, know how to give good gifts to your children, how much more will your heavenly father give the Holy Spirit to those who ask him?

Luke 11:11–13⁴

We create an invisible being; because the being is human-like, we enter into a human relationship with the being; and that back and forth sociality, which we expect to be parental, is what we call prayer.

Yet sometimes the Christian seems to get the scorpion. Sometimes the parking space does not materialize. The college admissions envelope in the mailbox is thin and sorrowful. The golf ball misses the hole. The bullet finds a home. It is not hard, for a secular person, to view prayer as a practice of monumental foolhardiness in the face of facts—in short, as a mistake. But those who pray continue to do so, despite prayer’s apparent inefficacy. Job says: “I cry out to you, God, but you do not answer; I stand up, and you merely look at me” (Job 30:20).⁵ Failure sluices through the Psalms like water. “Oh Lord, why do you cast me off? Why do you hide your face from me?” (Psalm 88:13–14). Many psalms adore God and exalt God. “I will sing of your steadfast love, O Lord, forever” (Psalm 89:1). Many despair. “My God, my God,” the psalmist cries, “Why have you forsaken me?” (Psalm 22:1).⁶ It would be hard to claim that the people of Israel did not notice that their prayers did not always achieve their goals. Still they prayed.

We cannot—as Durkheim told us about religion—truly understand prayer if we insist that it is founded on a lie. It makes no sense to treat humans as fools who fundamentally never notice that the exchange is asymmetrical, or that a request goes unfulfilled. Of course there is confirmation bias. Of course people remember the prayers that seem to be answered, and ask what they must have done to disappoint God when they are not. But confirmation bias is not enough to explain the remarkable resilience of the human habit of prayer.

It is true that you can lessen the tension between the reasonableness of humans and the apparent unreasonableness of prayer if you treat the behavior as more or less hard-wired, a leftover, if you will, from other genuinely useful cognitive adaptations. The great achievement of evolutionary psychology has been to show that there is something basic to human intuition that undergirds the very idea of gods and spirits. Scholars argue that the fear that one would be eaten by a roving lion, or killed by a man who wanted your stuff, has shaped the way our minds have evolved (Guthrie, 1993; Boyer, 2001; Barrett, 2004). Our hunter-gatherer ancestors were more likely to survive if they interpreted ambiguous noise as the sound of a predator. Most of the time it was the wind, of course, but if there really was danger, the people who worried about it were more likely to live. As a

⁴ The quotation is taken from the New American Standard Bible.

⁵ The quotation is taken from the New International Version.

⁶ These quotations are taken from the New Revised Standard Edition.

result—the argument goes—when we moderns think intuitively, we are more likely to generate ideas of people we cannot see. That makes the idea of an invisible god seem plausible to us. It makes it “natural” to believe in God.

However, intuitive plausibility is one thing. Measured, sober faith is another. Those are the two different kinds of thinking that the economist Daniel Kahneman calls “system one” (quick intuitions) and “system two” (slow and deliberative judgment) (Kahneman, 2003). When we’re scared in the dark, we populate the world with ghosts. When we consider in full daylight whether the ghosts were real: ah, that is another matter. And people pray, day after day, despite sober consideration and rational reflection. The evolutionary psychologists have captured something terribly important. But they do not explain why people pray.

I have come to think about prayer as a metacognitive practice that helps people to deal with the disappointments and the difficulties of their lives. In fact, I see religion in general as a means by which people set out to create an emotionally more comforting world, with prayer as its primary vehicle—as a type of emotional management system. I do not think that emotion management is usually the goal, although, particularly in recent decades, as religious conviction has become a lifestyle choice, religious practices may recruit followers by arguing that practice will make them happy. My argument is that emotion management is the consequence of the metacognitive features of ordinary, everyday practice—whether the person praying has emotion management as their goal or not.

In some general sense, this perspective is not novel. Jerome Frank (1961) argued over 50 years ago that religious healing and psychotherapy both worked for the same reason: they persuaded the suffering subject that the priest/healer/therapist had the authority to heal him, and persuaded him that they shared a symbolic system within which healing could occur. But Frank was focused on an outcome—healing—and his discussion is often relegated to the discussion of symbolic healing as something that religion happens to be good for, rather than central to what religion is.⁷ This is a shame, because it leads us to overlook one of the most important and most basic of all human actions: that humans pray. We need to think about this prayer as an end in itself, not as something that gets you something. Doing so allows us to see what Kierkegaard saw so clearly: prayer may not change God, but it changes the person who prays. Prayer changes people because prayer alters the way people attend to their own mental processes (Kierkegaard, 1948 [1847], pp. 44–5).

Prayer as metacognition

The central act of praying is paying attention to inner experience—thoughts, images and the awareness of your body—and treating those sensations as important in themselves

⁷ Certainly the idea that religion is fundamentally about the regulation of emotion is not central to the way that many anthropologists have thought about religion, although Thomas Csordas’ fine *The Sacred Self* (Csordas, 1994) is an exception here.

rather than as distractions from the real business of living. That is what makes it a metacognitive activity: a cognitive action (broadly conceived) that takes the cognition of the actor as its focus. When we pray, we attend to the way we pay attention. We think about what we are thinking. We respond emotionally to our emotional responses. And often, we try to change our thinking, feeling, and attending so that they are in line with the way we would rather be. In expressing gratitude, we are changing what we remember of the day; not the irritating comment, but the warm smile; not the cold morning, but the lovely afternoon; not the office quarrel, but the smooth, dappled sunlight on the trees. So prayer is in part a memory practice: the practice reworks what we remember of the day. But prayer is also an exercise in anticipating the future. When we ask God for change, we reach for a world to come that is better than the world in which we find ourselves, and we ask ourselves to imagine that better world, and who we would be within it. Of course, local cultural ideas shape the content of what the person praying for wants—a calm, smiling surface or an excited grin, detachment from a veil of tears or identification with a god in agony. But the point remains that prayer practice is above all things a reflection on reflection: an attempt to sculpt, shape, reframe, reword and remaster thoughts and feelings so that they become different from what they were and better.

How might that work?

Consider first what we might call the “overt” features of prayer. Anne Lamott charmingly calls these “help, thanks, wow” (Lamott, 2012). A common evangelical acronym adds “sorry” in ACTS: adoration, confession, thanks, and supplication. These are Christian tags, but they work well in other contexts. Here is the oldest fixed prayer in Judaism, the Shema, recited in the ancient tongue both morning and night:

Hear, O Israel, the L-rd is our G-d, the L-rd is One.⁸

Blessed be the name of the glory of His kingdom forever and ever.

You shall love the L-rd your G-d with all your heart, with all your soul, and with all your might. And these words which I command you today shall be upon your heart. You shall teach them thoroughly to your children, and you shall speak of them when you sit in your house and when you walk on the road, when you lie down and when you rise. You shall bind them as a sign upon your hand, and they shall be for a reminder between your eyes. And you shall write them upon the doorposts of your house and upon your gates.

And it will be, if you will diligently obey My commandments which I enjoin upon you this day, to love the L-rd your G-d and to serve Him with all your heart and with all your soul, I will give rain for your land at the proper time, the early rain and the late rain, and you will gather in your grain, your wine and your oil. And I will give grass in your fields for your cattle, and you will eat and be sated. Take care lest your heart be lured away, and you turn astray and worship alien gods and bow down to them. For then the L-rd’s wrath will flare up against you, and He will close the heavens so that there will be no rain and the earth will not yield its produce, and you will swiftly perish from the good land which the L-rd gives you. Therefore, place these words of Mine upon your heart and upon your soul, and bind them for a sign on your hand, and they shall be for a reminder between

⁸ This is a Chabad translation: the text comes from Deut 6:4–9; Deut 11:13–21; Num 15:37–41. It adds “Recite the following verse in an undertone” before the second line, which is not part of the biblical text.

your eyes. You shall teach them to your children, to speak of them when you sit in your house and when you walk on the road, when you lie down and when you rise. And you shall inscribe them on the doorposts of your house and on your gates—so that your days and the days of your children may be prolonged on the land which the L-rd swore to your fathers to give to them for as long as the heavens are above the earth.

The L-rd spoke to Moses, saying: Speak to the children of Israel and tell them to make for themselves fringes on the corners of their garments throughout their generations, and to attach a thread of blue on the fringe of each corner. They shall be to you as tzizit, and you shall look upon them and remember all the commandments of the L-rd and fulfill them, and you will not follow after your heart and after your eyes by which you go astray—so that you may remember and fulfill all My commandments and be holy to your G-d. I am the L-rd your G-d who brought you out of the land of Egypt to be your G-d; I, the L-rd, am your G-d.

The Shema commands him who prays to love God with all his heart and in his action; it offers blessings to those who do so and threatens death to those who do not; and it contains instructions to create practical reminders so that in the course of the day one will see these reminders and bring one's awareness back to God.

The Lord's Prayer is a little gentler with those who disobey, but the themes remain the same:

Our Father in heaven,
 Hallowed be your name
 Your kingdom come,
 Your will be done,
 On earth as it is in heaven.
 Give us today our daily bread.
 And forgive us our debts,
 As we also have forgiven our debtors.
 And lead us not into temptation,
 But deliver us from the evil one.

Matt 6:9–13⁹

The Book of Common Prayer (1662) added: "For yours is the kingdom and the power and the glory forever and ever, amen". In many churches, the Lord's Prayer is engraved behind the altar, hung on banners above the nave, and recited daily by the congregants.

One of the most important prayers of the Navaho is this:

At Rumbling Mountain
 Holy Man who with eagle tail-feathered arrow glides out
 This day I have come to be trustful
 This day I look to you (for help)
 With your strong feet rise up to protect me
 With your sturdy legs rise up to protect me
 With your strong body rise up to protect me
 With your powerful sound rise up to protect me
 Carrying the dark bow and the eagle tail-feathered arrow with which you transformed evil
 By these means you will protect me

⁹ The quotation is taken from the New International Version.

These you will hold protecting me
 So that I, being at a place behind you, evils will pass me
 Evil ghost power of all kinds will go past me
 This days from the tips of my toes it will swell out from where it does not belong
 From the tips of my fingers it will move out (in swelling fashion)
 From the tips of my fingers it will move out
 From the tip of my speech it will move out
 No weapon of evil sorcery can harm me as I go about
 This day I shall recover
 Safely may I go about
 Your child I have become
 Your grandchild I have become.

(Reichard, 1944, p. 59)

This is the opening in one of the central healing rituals for the people. The ceremony proper lasts eight days and the prayers must be memorized word for word. But the basic structure of the prayer represents the common structure of Navaho prayers more generally, Gladys Reichard remarks. Navaho prayers seek to attract good and to deflect or scatter evil. The point of the prayer, she argues, is to make obstinate powers work for those who pray (Reichard, 1944, p. 6).

What are the central shared features of these prayers that might affect the well-being of the person who prays?

I: Gratitude: cognitive restructuring

The most explicit overt feature of the monotheistic faiths is that God is good (and, in the Navaho tradition, that God can become good, or express his goodness, with the saying of the prayer). No matter what has happened that day, no matter what the sorrow or the loss, the God who has made this world is a good one and the works of his hands are good, and the person who prays is grateful for the goodness. “The Lord gave, and the Lord has taken away: blessed be the name of the Lord” (Job 1:21).¹⁰ Judaism requires those who have lost loved ones to stand in public—there must be ten adult men—and recite the Mourner’s Kaddish: “May his great name grow exalted and sanctified in the world that He created as he willed.” A man who has lost his father must say aloud before others, and daily, that the God who is in some fundamental sense the author of his suffering is good. It is the most obvious feature of prayer: that the person who prays sees their small griefs and larger struggles and thanks God for the ways in which they are good. One evangelical woman, for instance, telling me a story, explained that she walked out into the frozen grimy landscape of midwinter Chicago—“It was like icy rain and gray and cold and it was sleety”—and remembered how she prayed: “God, I praise you that it was just not snowing and it’s not accumulating and the streets aren’t icy.” Giving thanks, expressing gratitude and asserting that God is great: those acts require you to look at troubles and spell out to yourself the ways they contain blessings.

¹⁰ The quotation is taken from the New American Standard Bible.

Cognitive restructuring is the basic mechanism, or at least the goal, of cognitive behavioral therapy. Aaron Beck, arguably the person most responsible for developing this style of treatment, decided that the most costly feature of depression was not sadness per se, but the slow, recurrent rumination on worthlessness and failure—what Freud called the self-reproaches and self-revilings, “dissatisfaction with the ego on moral grounds” (Freud, 1957 [1917]). It is what we do: our minds wander, and unbidden, nagging thoughts intrude. When someone is depressed, those thoughts form a miserable chorus so relentless they recede from their status as thoughts and feel like truths, or facts about the world. A cognitive behavioral therapist asks clients not so much to remember their childhood or even to marshal their anger (Freud’s primary insight in “Mourning and Melancholia” being that melancholia resulted from unacknowledged anger) but instead to identify specific recurrent negative thoughts. It does so by asking people to pay attention to their thoughts—to observe them like a naturalist observing dolphins from a boat in the bay, clocking what swims by and how often and with whom. The client takes this data to the therapist, a literal list of observed thoughts, and, together, client and therapist work out what is wrong about the thought (“You won’t really die if you don’t get any sleep tonight”) and come up with sentences that could replace it when it reappears (“I’ll just be a little tired in the morning. No biggie.”). In this approach, thought is a behavior you can change.

Cognitive behavioral therapy works—which means that it works to some extent, at least for some people. All therapy is partial, as is all prayer (and note that Job could bless God’s name after God had destroyed his crops and animals—but he could not bless God’s name after God had blasted him with boils, and Job sat weeping in the ashes of his household, scratching at his sores with potshards.) But there is better empirical support for cognitive behavioral therapy than for any other psychotherapy, and its basic practice is at the heart of prayer because prayer is above all else a behavior that alters the thoughts that you think. When people pray about their troubles and assert that God is good, they are describing their sorrows and reimagining them in part as gifts. They sit in peace and think about beauty and they aim for joy. “Safely may I go about,” the Navaho speaker says, “I have become your child.”

II: Confession: organizing experience, setting small goals

To confess is to remember the past, and to think through what you have done. Setting aside what you do next, which is to resolve to do things differently, the act casts experience into language. And so thinking about the past organizes it and gives it meaning. That alone makes you feel better. The psychologist James Pennebaker has found that simply describing past events can lift your mood—that merely writing down the details of an emotionally distressing event makes it graspable through the mere act of catching its murk in words. To render the specifics of the past into language—and particularly into narrative—gives control to the one who uses the words. It makes experience more comprehensible and less overwhelming (Pennebaker, 1989).

That is what I see people doing when they pray. They think about the previous day. They think about their week. They run over what people have said to them and how

they responded and the way that made them feel. They pray specifically and personally because the acts they pray about are specific and personal acts. Even if the specific prayer is scripted, the accompanying sotto voce cannot be. You do not say “Lead us not into temptation, and deliver us from evil” without some detail that flits across the mind unless the words are truly empty to you, unless you recite them so quickly you do not really hear them.

Does scrupulously attending to the past give you more control over your behavior in the future? Augustine thought that only when you could see yourself clearly could you become a different person. He cried out just prior to his conversion:

You Lord, while he was speaking, were turning me around so that I could see myself; you took me from behind my own back, which was where I had put myself during the time when I did not want to be observed by myself, and you set me in front of my own face so that I could see how foul a sight I was—crooked, filthy, spotted, and ulcerous. I saw and I was horrified, and I had nowhere to go to escape from myself.

Confessions, Book 8, Chapter 7 (Augustine, 2001, pp. 163–4)

It is not a pretty read. It is not what leads to the change. It is not even (from an observer’s perspective) particularly accurate. Yet Augustine was clear that this vivid, precise view of himself was necessary for the great change that he will make in his life, because it gave him mastery over his own story.

In the daily (or thrice daily) Jesuit Examen, developed by the brilliant sixteenth-century Ignatius of Loyola, one must exact “an account of self with regard to the particular matter decided upon for correction and improvement. He or she should run through the time, hour by hour or period by period, from the moment of rising until the present examination” (Loyola, 1992, p. 25). Freud went farther: he asked his patients to speak as freely as they could, to allow recollection to slip past the censors we impose upon our own memories. He believed that if you could describe the past precisely, you would no longer be caught within the pincers of unconscious repetition.

Augustine, Ignatius, Freud—they were all aiming for climactic change: a full, deep commitment to God, the paralyzed hysteric set free. But notice that this focus on the concrete and particular creates achievable goals along the way. Reciting small details about how one has failed automatically makes small successes plausible. In an examen, ticking off small sins on a grid, you do not pray to be perfect. You resolve not to indulge in an after-dinner snack of chocolate cake, to bite back that sharp retort. Thinking about your missteps in the near past trains your attention on the near future, and the near future is much more manageable than the grand ambition. It is a terrible mistake to set out to write a book, or it is for me. My books are written paragraph by paragraph, each one drafted and redrafted, a flagstone set down along a path.

III: Asking: externalizing hope and revising goals

To pray is to ask. People pray to be rewarded with olive oil and honey; for daily bread and the forgiveness of debt; for protection and for care. They pray about healing and they

pray about work. They pray about interviews and jobs and pregnancies and envelopes that come in the mail. They pray about parking and football games. They want help. This is the *De Profundis*: “Out of the depths I cry to thee, Lord! Lord, hear my voice!” (Psalm 130:1–2).¹¹

To ask is powerful because it is an act. The Dinka man who ties his grass into a bundle to prevent the sun from going down but does not believe that the act is inherently efficacious does so, Lienhardt explains, because it makes him feel better. The action itself makes him feel effective, the way cleaning up your desk before you write a paper can make you feel effective, and that sense of efficacy itself can then spur the writing.

More specifically, to ask is a mental act that formulates a better future. To hope is not in itself a metacognitive act, but to choose deliberately to hope is an act that wills attention in a particular way. To pray is to make hope external, and the mere act of doing so can still panic in the face of uncertainty. That sense of sideways accomplishment—you have not achieved your goal, but you have done something with the aim of achieving your goal—may lie behind Ted Kaptchuk’s remarkable demonstration that when people were given an inert substance to treat their painful abdomen and told that the substance was a placebo—that it had no medical benefit—but that others had reported feeling better after taking it, these subjects also reported feeling better themselves.¹² One thinks of the primary mechanism behind placebo as expectation: believe that the healer will heal, and he will. But Kaptchuk’s experiment suggests that there is more than expectation involved. The *De Profundis* suggests that it may be action itself: that to pray in the face of hopelessness is to assert that hope is real because one has acted. Placebo, Kaptchuk comments, is theatre (Ted Kaptchuk, personal communication).

To ask also alters goals, because the moral expectations around the appropriate goal of prayer—one’s sense of what God would want one to pray for—will shift what that someone prays for and what counts as a fulfillment of that prayer. Prayers for healing, for example, often include a shift in focus, so that one prays not only for the remission but that God’s will be done. The explicit acknowledgement asserts hope for the particular while broadening the sense of what counts as God’s response. Again, those praying may not have the goal of controlling their emotions in mind. But they certainly hold explicitly the goal of changing their mental representation to be accord with what they imagine God would want. That deliberate choice to alter their mental processes may change them—sometimes in surprising ways.

¹¹ The quotation is taken from the New International Version.

¹² From a supernatural perspective, of course, the act works because it is efficacious. That lies behind Reichard’s analysis of Navaho prayer. Field and Blackhorse pursue this analysis: “in the view of many Native American communities, language is seen not as autonomous from context, but as performative, and having the power to alter reality.” Ritual speech commands and compels the gods. Field and Blackhorse (2002, pp. 217–30) further argue that language does so by identifying the person praying with the deity and asserting a changed world.

For instance, the anthropologist Anna Corwin did fieldwork in a Franciscan convent among nuns who had worked as missionaries, often abroad, before returning to the convent for retirement. Sister Theresa had been one of the nuns sent to Oceania. There she had contracted amoebiasis so thorough-going that by the time she sought medical attention, the disease had become incurable. For 30 years, she had trouble walking. Parts of her infected body had been periodically removed through surgery; this included one of her feet. For years, Corwin wrote, Sister Theresa had interpreted her pain as God's will and judgment and she had prayed to him for mercy. But her life had spanned the breach of Vatican II, the Catholic church's attempt to soften its theology and make God more accessible to his worshippers. Before Vatican II, Sister Theresa explained to Corwin, she had been taught to pray as if God were far above her, a great and holy authority. Afterwards, they were told that all life is divine and that God resides in it all. One day Sister Theresa decided that if all life was divine, her amoebas also were God. She called a meeting of all the amoebas in her body, she reported, and told them that she loved them. These days, every morning she stands in front of her mirror and "addresses all of God within herself." She still experiences pain, but the pain seems less significant. It no longer seems like God's punishment, from which she needs to be released by his mercy, but as a natural part of God's world. Corwin found evidence that these nuns—riddled with tropical disease as they were—experienced greater well-being than their irreligious peers (Corwin, 2012).

IV: Adoration: creating a relationship in which you are loved.

"You shall love the L-rd your G-d with all your heart, with all your soul, and with all your might." The first three overt features of prayer are examples of cognitive reframing and reconstrual. Adoration activates another fundamental human system: attachment, or, in the language of social anthropology, social relationship. It does seem as if God becomes a social relationship for many. The psychologist Uffe Schoedjt and his colleagues asked Christians to pray informally to God while in a scanner, and their brains behaved as if they were talking to a friend (this did not happen when they simply recited the Lord's prayer) (Schoedjt et al., 2009). We know that people feel less lonely when they believe in God—a significant health issue, since loneliness has about as much impact on when someone dies as smoking (Holt-Lunstad, Smith & Layton, 2010). In my own work, when I gave subjects (most of them charismatic Christians) standard questionnaires, the more someone affirmed, "I feel God's love for me, directly," the less lonely they were, the less stressed they felt that month, and the fewer psychiatric vulnerabilities they displayed (Luhmann, 2012, 2013).

When that sense of an invisible other can be sustained, that other offers—to some extent—what a real friend might. The psychologist Shane Sharp set out to explore how prayer helped those who struggled with grief, fear and anger by speaking with over 60 women from around the United States who had fled domestic violence in their homes. He asked them, as neutrally as he could, whether they had talked with God during their abuse and how it had been helpful. Almost all of them were Christians, though their church membership ranged widely. Some were evangelical, some Catholic, a few Mormon, and

some spiritual-but-not-religious. Sharp identified five ways in which prayer helped to soothe the women's distress. Talking with God provided a person-like other to whom to express negative emotions—above all, fear, anger and shame. It provided a means for positive reappraisals: the women felt that God had a higher opinion of them than their partner did. Talking with God made them feel safe, as if they were in less danger than they were before they prayed. Talking with God was a distraction and a means to zone out, even during the abuse itself. And finally, talking to God made them feel more forgiving. Sharp wasn't sure all of these strategies were, in fact, always helpful. He did not think that it was always wise for these women to minimize danger and forgive their assailant. But he thought that prayer made the women feel that they had a person in their corner who could help.

I believe that this feature of God—that God is a social relationship in the life of the person who prays—is hands down the most powerful and consequential feature of prayer. Freud thought something like this, of course, but to Freud, God was a tincup chimera, a shimmering illusion forced into existence by the human inability to look reality in the face.

Yet God—or rather, a human's understanding of God—is a way to improve on reality. Anthropologists see quite clearly that persons are embedded in social worlds and that to be human is to live in the presence of others. God takes on the qualities of those local social groups: more egalitarian in America, more authoritative in Africa, more immersed in a web of familial relationships in India (Luhmann, 2017). But while God—imagined by humans in a specific society—takes on the characteristics of that local social world, the God that people represent can make these characteristics better. God can be more loving than a human father, more responsive than a human mother, more reliable than a human best friend. The emphasis on God's love is most striking, of course, in monotheistic love-centered faiths. But it is hardly absent in others. Think of Apuleius on the beach before Isis, a goddess with so lovely a face, he reports, “that the gods themselves would have fallen down in adoration of it,” a goddess whom he adored and who delivered him from his trouble—in this case, that he'd been turned into a donkey (Graves, 1954, p. 237). Or Arjuna facing Krishna in the *Gita*: “He who in this oneness of love,” the god says, “loves me in whatever he sees, wherever this man may lives, in truth this man lives in me” [*Bhagavad Gita* 6:28–31 (Mascaro, 1965)]. Or, for that matter, the great goddess, terrifying and mighty, yet with oh so many warm and soothing breasts. Fear courses through these religions as it does through the Hebrew Bible and in fact, through the New Testament, with its rivers of blood and the horrific beast in Revelations. But love is never absent. No anthropologist has reported a faith in which none of the gods can be experienced with warmth and love.

This is a matter over which we should not skip lightly. The nineteenth-century vision of so-called primitive religion imagined natives who approached their makeshift altars to offer sacrifices in a paroxysm of fear. But no anthropologist has reported a religion in which fear is the only driving emotion. Of course humans fear the darkness and of course fear must be a powerful spur to reach toward supernatural protection. Yet the instinct to

people the world with others like you, to find invisible others who care for you, is equally as strong. We are social animals. Attachment drives us as much as survival. Love and fear both matter.

For this improvement on reality to work, the human must experience it as real. The imagined social relationship with God must be felt as a real social relationship. In fact, I suspect there is a sweet spot between inner experience and the outer world that both invisible gods and human therapists need to reach: real enough to feel external, intimate enough to feel deeply connected. Therapists reach it through the patient's intense emotional experiences in the sessions, so that the therapist stays with the patient throughout the week, a wise and caring disembodied presence. For an invisible God to serve as an emotionally salient other whose counsel and wisdom seems real, the imagined representation of God—that daydream in the mind—must feel like more than a daydream. It is the capacity to experience what must be imagined as more than mere imagination that makes possible religion's power. Its vehicle is the metacognitive practices in prayer.

Absorption as metacognitive practice

Thinking of what is good in your life, recounting what has just happened, and setting specific, achievable goals are practices that do, we know, have benefits, whether or not they are overseen by a god. But you do not get the emotional rewards of a loving social relationship through prayer unless you experience God as real to you, at least to some extent. By this I do not mean an abstract commitment to God's reality, but a sense that there is a particular God who pays attention to you and will respond to you—not in the misty future, but here and now and in the world. This is a much harder demand than abstract belief, and it requires constant work. Much of this work is also metacognitive. God is made intimately real to people through the way they pay attention to their own mental events.

The claim that it is hard to sustain a belief in God—as least, in a God that matters, an invisible social companion who has real effects on your life—is not an obvious perspective to many secular observers. To many secular observers, those who are religious believe all too easily. But in fact, the sense that an invisible person is listening is deeply counterintuitive. When you talk to God, you must use your imagination even if you are talking to a stone statue, because you must believe that God can listen, and normal, ordinary stones do not—and yet our cognition has evolved to help us to navigate the normal, ordinary world in which stones do not speak, thoughts are not things, and what you imagine takes place in your mind and not in the world.

Gods and spirits are exceptions. We talk to these outsiders from inside our minds. Reinhardt Niebuhr once said that the Hebrew tradition distinguished humans from other living creatures not because they could reason, but because they could talk not only with their neighbors but with themselves and God. People certainly talk to gods of other faiths within their minds and represent them within their imaginations. Here, for instance, is one of Meyer Fortes' Tallensi subjects, describing how he interacts with his dead father

It is exactly as with living people. If you have a son and you are bringing him up and he refuses to farm, you upbraid him. You say you have fathered him with tribulation and here he is refusing to farm what then are you to eat? If he doesn't farm will he ever get himself a wife, will he achieve children? Now if someone does you a favor, wouldn't you go and thank him? And if you do someone a favor and he comes to thank you with however small a token would you not do a favor again?

(Fortes, 1970, p. 195)

The sheer capacity to have such more-than interior conversations rests upon our fundamental human sociality. The anthropologist and psychologist Stephen Levinson writes of what he calls the "human interaction engine": "The roots of human sociality lie in a special capacity for social interaction which itself holds the key to human evolution, the evolution of language, the nature of much of our daily concerns, the building blocks of social systems, and even the limitations of our political systems" (Levinson, 2006, p. 39). We are, he suggests, quite good at interaction—even without language. Travelers to strange lands—Captain Cook on the South Seas, first contact gold prospectors in the New Guinea highlands—communicate remarkably well without a single word in common. Infants display back-and-forth responsiveness long before they can talk. There is something that sociable others evoke from us, and it takes very little to set it in motion.

And yet humans do not easily assume that the invisible other is truly present. We are skilled at distinguishing the conversation—really, usually, the monologue—we have with a spouse or a colleague from the actual event. We make mistakes, of course ("I told you I was out on Tuesday night"). But mistakes are rare moments in the great flowing rivers of our inner awareness. People often need to work to persuade themselves that the thought that comes in to their mind is from God, or even that God is always present in their lives. I remember a young evangelical woman who attended a church where people spoke comfortably about talking with God. She set aside "quiet time" to listen to God. She spend hours in church on Sunday morning, in evening housegroup and in prayer, and she knew God spoke to her. Yet she once told me that she had been on a bus when God gave her a "word" in her mind for someone sitting across from her. She didn't know whether she should say anything and later asked the pastor what she should have done. Why don't you ask God next time, he suggested. She was flabbergasted. She had forgotten that she could.

I want to suggest that there are two basic features of prayer that help the act of prayer seem as if it is an actual conversation rather than a gesture in an internal make-believe. The first is absorption, which is a particular way of paying attention to inner events. The second is story, which is a device that enhances absorption, by making it easier to become immersed in what must be imagined.

Absorption is the capacity to become engrossed in an object of attention—either so taken with a walk in the woods that one forgets one's troubles, or so caught up in a daydream that the everyday world fades. Absorption is trait-like: some people are more likely to become absorbed than others. It is also skill-like. People who practice using their inner senses become better at experiencing those inner objects as real, and the inner imagery becomes more vivid, feels more external, to them (Tellegen & Atkinson, 1974; Luhmann, Thisted & Nusbaum, 2010). Absorption is perhaps the most important metacognitive

feature of prayer, because absorption is the practice through which the inner object of attention comes to feel more real.

Perhaps the most famous example of prayer practice in the anthropological tradition is Levi-Strauss's account of a woman in childbirth who is helped by a shaman's song of supernatural warriors.

The shaman sang a song over her in which he described the woman's distress, and then the midwife's decision to call for him; that she ran along the forest paths to find him; that he came and burnt coca and assembled the little wooden figurines he thought would help. Having described the realistic setting of the intervention, the shaman's song then went on to describe an immaterial world in which good spirits (*ngellum*) marched up the woman's birth canal and battled with the bad spirits of the goddess who stole the woman's soul. The spirits win the battle, and restore good relations with the goddess, and the child is born. Levi-Strauss emphasized the way the shaman shaped the woman's attention:

Everything occurs as though the shaman were trying to induce the sick woman . . . to relive the initial situation through pain, in a very precise and intense way, and to become psychologically aware of its smallest details.

(Levi-Strauss, 1963, p. 188)

He emphasized the sensory specificity of the shaman's song:

The cure begins with a historical account of the events that preceded it, and some elements which might appear secondary . . . are treated with luxuriant detail as if they were, so to speak, filmed in slow motion.

(Levi-Strauss, 1963, p. 188)

He argued that the cure depended upon making what was unutterable expressible:

in making explicit a situation originally existing on the emotional level and in rendering acceptable to the mind pains which the body refuses to tolerate.

(Levi-Strauss, 1963, p. 192)

Levi-Strauss thought he was explaining why the song healed. James Dow would later formalize the argument in the *American Anthropologist*. His model of symbolic healing had four features (Dow, 1986, p. 56):

1. The experiences of the healer and healed are generalized with culture-specific symbols in cultural myth.
2. A suffering patient comes to a healer, who persuades the patient that the problem can be defined in terms of the myth.
3. The healer attaches the patient's emotions to transactional symbols particularized from the general myth.
4. The healer manipulates the transactional symbols to help the patient transact his or her own emotions.

The primary intervention is to make an externally given symbol feel emotionally real to the patient—and then to manipulate the symbol, to alter the patient's emotions.

This is a powerful model, and there is undoubtedly something right about it. And yet it depends on the assumption that the symbols are in some straightforward sense real to the patient: that spirits exist, that the shaman can invoke them, and that the patient believes that they are there.

In fact, one can read the article not only as an account of how symbols heal, but how the shaman made what had to be imagined feel more vivid, so that what the woman must imagine in order to affect a cure feels more persuasively present. That reading would certainly be a more direct rendering of the shaman's actions. The shaman helps the woman to experience the spirits as real by drawing her attention to them and telling her that they are real; incorporating them into the narrative without any break from the previous realistic description; giving them vividness; and creating interaction. If we focus our attention not on the emotional transformation that Levi-Strauss and Dow (and later Thomas Csordas) rightly took to be important, and instead ask what the Cuna shaman did to make the immaterial spirits more present for the woman, we see four steps:

Expectancy: The shaman tells the suffering woman that the spirits will appear—now. She is to pay attention to them.

Epistemic ambiguity: The shaman moves the narrative from describing something real to the eye to describing something that can be seen only with the mind's eye. He does not seem to distinguish between the reality of the immaterial and the material, but weaves them together, the technique that in modern literature is called magical realism.

Sensory enhancement: The shaman describes the visual details and sounds of the good spirits so that the woman can see them for herself—their pointed hats, their loud cries, their bristling, sharp-pointed spears.

Engagement: The shaman invites the woman to interact with the spirits. She does not talk to the spirits, but they are, after all, walking up her vagina and fighting at her cervix, and she is encouraged to give them her full awareness.

These are techniques that help to make what must be imagined more actual. They are important because the emotional transformation of symbolic healing can take place only if the symbol is experienced as having external agency—if it seems authentically real to the person experiencing the pain. And as attention is focused on the inner objects, attention to the everyday diminishes. All forms of prayer elicit at least a light trance. As they do, the inner object feels more present to the senses.

The metacognitive role of story

This “making real” becomes more effective still through story. When you become caught up in a story that is not your own, you feel emotions that are not your own. And for a time, you leave behind your anxious and bedraggled self.

All unscripted prayers are acts of imagination in which those who pray use their imagination to represent an invisible being about whom they know deep and powerful stories, and those stories can spring to life in their prayer. Even scripted prayers demand that you

enter a story. In *Mere Christianity*, C. S. Lewis asks his reader to consider the Lord's Prayer. "Its very first words are Our Father. Do you see what those words mean? They mean, quite frankly, that you are putting yourself in the place of a son of God. To put it bluntly, you are dressing up as Christ. If you like, you are pretending (Lewis, 1980), pp. 187–8). Prayer, Lewis said, is not following a set of rules written down in a book. It is about experiencing—"pretending"—that a real person, Christ, is in the room with you as you pray. The person who prays not only enters into that imaginative supposition—an invisible man is present—but knows that drama of Christ's journey, sometimes in remarkable detail. Christians weep when reading about Christ's passion and they laugh at Mary's joy at her triumphal pregnancy. They shiver in that cold night with the shepherds in the field.

At least, they know that they should. The whole history of Christian prayer, from the early church fathers through the medieval monasteries up through the thousands of prayer manuals you can buy these days at Christian Book Distributors, is an invitation to know the scripture and enter into it with all your senses, so that the stories become alive to you.¹³ Loyola is famous for his explicit instructions to use all one's inner senses—to see, hear, feel, taste, and smell scriptural stories in the mind—but the insistence of using the inner senses to grasp the story runs down the centuries. When people pray, they too are swept up into the images and their surround. One of my evangelical subjects said this about her prayer:

Sometimes when I pray I see his glory. There's what I call it the throne room, and depending on what I'm praying about and what I'm doing, I'm like in different positions in the same room. Very often I'm at the back but sometimes there's something where I'm up in front. It's just like, I mean this is gonna sound a little wacky but it's just like light. It's like a throne and robes. Some of the images are like in Revelations, light that you can't really get right up to and you don't want to. You can't really exactly see but it's being in the presence of the Lord. And that's where you hear the prayers. Sometimes I feel like I'm hearing the prayers that have gone before and the prayers that are going on now and the prayers that are to come and I just sort of join in that chorus.

No-one who prays regularly prays only in the abstract. They pray in story: to someone, for something, about something. They use images and narratives.

This is true of course of other faiths. The Hindu before the puja cupboard sees spread before her Ganesh with his rat at his feet and his big round elephant belly, Krishna with his flute and maybe as a happy baby, and often dozens of other avatars and gods and goddesses, each with their characteristic symbols and myths that the human worshipper will know. In her modern Chettinad-style house, a middle-class Hindu professional smiled as she explained to me what she did each morning before her puja cabinet. She had a collection of half a dozen small icons—Ganesh, Krishna, a snake, some others—and each morning she bathed them in milk and dried them and drank the milk, because her mother did that too. "I'm not ritualistic, but if my mother told me to do it, I do it." The snake was important to her because she'd had health problems, and an astrologer had warned her many years ago about these problems because of the conjunction of the

¹³ The exception being apophatic prayer.

stars around the snake at her birth. She recited a few Sanskrit slokas—she knew their meaning—and she talked to God. To her, God was Krishna—the Krishna of the young flute player and the lover with his gopis, as well as the stable wise husband and even the smiling toddler. “To a Hindu,” she said, “God is both parent and child.” But mostly he was a companion by her side. She imagined Krishna as always next to her—in the car when she drove, at her side when she saw her patients. She imagined him nodding yes and sometimes no, and sometimes when things were tough, she imagined that he hugged her. And when she had trouble getting pregnant, a friend gave her a Krishna statue that her friend said had enabled her to become pregnant, and it had worked: and years after, her daughter in college, she told me how she’d given a Krishna icon to another friend, a younger friend, when she had also struggled. And now that young friend had delivered, and the Krishna was coming home to her at last.

What does story do? The prayer story detaches us from the everyday. It breaks our attention from whatever is upsetting us, and refocuses it on what we want to experience. “Be still and know that I am God” (Psalm 46:10).¹⁴ Detachment—the central act of meditation, the deliberate disattention not only to the everyday surround but to the bubbling cauldron of an active mind—has a well-attested therapeutic impact on mind and body. After meditation, people feel calm. Their blood pressure improves, as does their immune function (Davidson et al., 2003). The prayer story sometimes brings us into catharsis. When Christians watch the movie “The Passion”—even when they simply read the Passion scenes in the Gospels—they cry. Through the pity and fear we see in tragedy, Aristotle argued, we purge ourselves of our own private fears. There is perhaps less medical demonstration of the power of catharsis, but there is an old psychodynamic adage that the patient who does not have intense feelings during therapy will not change their emotional patterns. And story facilitates *imaginative immersion*—a willingness to get caught up and absorbed—that too may have health benefits, because it seems to involve the capacity to experience what must be imagined as more real—as more vivid, more present, and in some sense more alive. Absorption allows us to diminish to some extent the sense of the world as we find it and to heighten a sense of the world as it could be (Tellegen & Atkinson, 1974; Luhmann, Nusbaum & Thisted, 2010). Intense imaginative immersion takes us out of ourselves by making what we imagine feel real.

And so one way to think about prayer practice is that it flips the script, to borrow a phrase used in another context by Summerson Carr (2011). The inner world is sculpted by the careful attention to feeling like God, talking with God, examining those inner anxieties from the spirit’s perspective and finding them humanly foolish or even finding that the spirit vanquishes in hand-to-hand combat, as the Cuna shaman does in supernatural form. In their place should be thoughts and feelings appropriate to the presence of God. Prayer is a practice that uses the enormous resources of human social life to soothe inner anxiety by in effect flipping private and public space. The inner world is externalized and

¹⁴ The quotation is taken from the King James Version.

external social life made inward and improved, and, to some extent, the private fears of midnight dissipate.

Prayer and well-being

We have known for some time that weekly church attendance keeps people healthy. People live longer. Their immune systems are more resilient and their blood pressure is lower.¹⁵ What it is about religion that leads to such outcomes is far less clear. Often, the only variable associated with religion in these studies is church attendance—along with all the other demographic data, subjects are asked to check off how often they attend services. And so people have offered some commonsense hypotheses. They have pointed out that going to church gives you a better social network—and certainly in many churches, when someone in the congregation gets ill or runs into trouble, others are there to help. Social support—the number of people you can depend on—is intimately linked to how long someone lives, and how well. People have also pointed out that those who go to church probably drink less, use fewer illicit drugs, and have less risky sex. And the data suggest that this is true.¹⁶

I have argued here that what you do when you pray contributes to good health. And so we come to another list: those features of prayer practice that may contribute to emotional—and thus, in the end, physical—well-being, and to our ability to deal with sorrow and buffer pain. Many have a metacognitive dimension.

1. A shifting of attention. In describing God's goodness (and thus focusing on what makes you grateful), in articulating the immediate past and setting specific goals for the immediate future, in stating what one hopes for and revising one's expectations, the person who prays reorganizes the way he or she thinks by paying attention to negative thoughts and deliberately replacing them with more positive ones. These are the techniques of our most empirically supported therapy. To some extent, for some people, they work.

¹⁵ In the United States, church attendance adds two or three years to one's life (Hall, 2006); there is a seven-year difference in life expectancy at age 20 between those who never attended church and those who attended more than once a week (Hummer, Rogers, Nam & Ellison, 1999). Religious observance boosts the immune system and decreases blood pressure (Woods et al., 1999; Koenig & Cohen, 2002).

¹⁶ Because the variable most consistently associated with better health is church attendance (Powell, Shahabi & Thoresen, 2003), people have argued that the effects may be due to social support, operationalized as an increase in social networks and more supportive social relationships (Ellison & George, 1994) or to the healthy behaviors of people more hesitant to drink, take drugs, or have casual sex (Clarke, Beeghley & Cochran, 1990). Many other mechanisms have some scientific support: cognitive outcomes that enable emotional coping efforts (Koenig, Smiley & Gonzalez, 1988; Sharp, 2010) and, in general a sense of meaning and coherence (Berger, 1967; Ellison, 1991). There is increasing evidence that the way God is understood also affects health outcomes. One study found that people who reported that they experienced God as close and loving also reported significantly fewer psychiatric symptoms compared with those who reported that they experienced God as approving and forgiving, or creating and judging (Flannelly, Galek, Ellison & Koenig, 2010).

2. The act of hope. The more specific act of choosing to focus on hope entails that simply by praying, the person who prays acts—and in acting, does something to heal the pain and assert the hope. The single act, the performance of a step toward healing, is probably the heart of what we call the placebo effect—a terrible word, because it implies a false intervention with a surprising outcome. Instead, we should see the act—the knotted grass—as an agent's deliberate mental act to claim the better outcome for one's own.
3. Absorption, or getting caught up in your imagination. The human capacity to turn away from the world as we find it and experience oneself, to some extent, in a world we create: this is the ability to disattend to the world around you and to hyper-attend to the world in the mind, to feel in one's experience that the world that we see before us is not all there is of the world. Absorption is perhaps the most general of the human potential for trance, dissociation, hypnosis, and their ilk.
4. Detachment. The other side of absorption, detachment is the capacity not only to disattend to the world before you but also to the thoughts in your mind. Detachment is the skill of meditators, be they Buddhists or Christians following the lead of Thomas Merton in *Centering Prayer*. Detachment also intertwined with trance. It is part of the great capacity humans have for breaking out from the everyday sensory world that hurts. It is the choice to disattend.
5. Catharsis, or intense emotion. When people feel powerfully, they feel different, and although the mechanism is not clear (Breaking settled emotional habits? A simple release?) intense emotions have been associated with healing interventions around the world (think the weeping storms in psychoanalytic therapy and in spirit possession). Intense weeping is often part of prayer. It is not in itself metacognitive, but it may follow from immersion in the story.
6. Story. You do not pray in the abstract, even in that foxhole. You pray to someone, who has a character and a past, and you yourself have a history with that invisible other. You remember things you have prayed about and often, times when those prayers helped. Just as you need the capacity to imagine, you need the narrative itself to structure what is imagined and how it unfolds. In prayer, it unfolds to help the person who prays (Who prays against themselves?), and the praying person comes to anticipate the ending, the love and the joy. Story too is not particularly metacognitive in itself, but it enhances absorption, and enables the object of attention to feel more real.
7. Attachment and the creation of a positive emotional relationship. The result, for at least some who pray, is relationship with a loving other. The relationship is more developed theologically in some faiths than in others, and imagined more explicitly as positive in some faiths than in others. But in any faith, those who pray, when they pray repeatedly and determinedly, find themselves in a social relationship with an invisible other. And, if they are lucky, and they have chosen the right text and persuaded themselves that they are not beyond the god's attention or only the subject of god's judgment, they will be in relationship with someone who loves them and cares for them, however the rest of their social world behaves.

Anything powerful can hurt as well as help. There is the trance of ecstatic worship and the trance of traumatic dissociation, and the person with the capacity for the first has also the capacity for the second. There are stories of redemption and triumph, and stories of destruction and loss. Wise, kind fathers heal and harsh fathers hurt. And no one knows which of those stories lurk behind their own expectations of their future. But what religion does is to provide powerful narratives and—to some extent—gods who love, and the repeated, determined practice of praying in the dominant story may, if you are lucky, change the through line of your own.

Conclusion

Of course, it does not always work. Sometimes, as Greg Simon points out in his ethnography of the Indonesian Minangkabau, the person who prays sits and feels nothing more than he is a troubled fool (Simon, 2009). Dealing with anxiety and distress is hard. Even Freud, in one of his last bleak essays—Janet Malcolm compared it to the dark brooding of a late Beethoven quartet—admitted that the practice of talking with someone did not always change people, despite the skill and caring of the therapist and the patient's desperate need (Freud, 1937; Malcolm 1981). Many of us struggle with habits we'd like to break and good intentions we want to enact but just don't. It is because those feelings are so painful that the therapeutic industry thrives. But then again, with therapy, sometimes, old habits do drop away. New patterns emerge. Therapy helps, for some people, to some extent and at some times. The same is no doubt true for prayer, whose overt features are much like the therapeutic interventions for which we have the greatest empirical evidence of efficacy and which in fact should be more powerful, because when God feels real to you, all your attention has been diverted to experience his love, care, and power. In the end, the experience of feeling God's realness may be more important than anything God actually delivers—the new car, even the remission. Thus, Job, facing the wreckage of his life with no assurance that the damage will be repaired, says to the God who has come out of the whirlwind: “My ears had heard of you but now my eyes have seen you” (Job 42:5).¹⁷ For Job, that was enough.

Acknowledgments

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¹⁷ The quotation is taken from the New International Version.

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References

- Augustine (2001). *The Confessions of Saint Augustine*. Trans. Rex Warner. New York: Penguin.
- Barrett, J. (2004). *Why Would Anyone Believe in God?* Walnut Creek: Altamira Press.
- Berger, P. (1967). *The Sacred Canopy*. New York: Anchor.
- Boyer, P. (2001). *Religion Explained*. New York: Basic Books.
- Carr, S. (2011). *Scripting Addiction*. Princeton, NJ: Princeton University Press.
- Clarke L, Beeghley L, Cochran J. (1990.) Religiosity, social class and alcohol use: An application of reference group theory. *Sociological Perspectives*, 33, 201–18.
- Corwin, A. (2012). Changing God, changing bodies: The impact of new prayer practices on elderly Catholic nuns' embodied experience. *ETHOS*, 40, 390–410.
- Csordas, T. (1994). *The Sacred Self*. Berkeley: University of California Press.
- Davidson, R. J., Kabat-Zinn, J., Schumacher, J., et al. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65, 564–70.
- Dow, J. (1986). Universal aspects of symbolic healing: A theoretical synthesis. *American Anthropologist*, 88, 56–69.
- Ellison, C. & George, L. (1994). Religious involvement, social ties and social support in a Southeastern community. *Journal for the Scientific Study of Religion*, 33,46–61.
- Ellison, C. (1991). Religious involvement and subjective well being. *Journal of Health and Social Behavior*, 32, 80–99.
- Field, M. & Blackhorse, T. (2002). The dual power of metonymy in Navaho prayer. *Anthropological Linguistics*, 44, 217–30.
- Flannelly, K., Galek, K., Ellison, C. & Koenig, H. (2010). Beliefs about God, psychiatric symptoms, and evolutionary psychology. *Journal of Religion and Health*, 49, 246–61.
- Fortes, M. (1970). *Time and Social Structure*. London: Athlone Press.
- Frank, J. (1961.) *Persuasion and Healing*. Baltimore: Johns Hopkins University Press.
- Freud, S. (1937). Analysis terminable and interminable. *International Journal of Psychoanalysis*, 18, 373–405.
- Freud, S. (1957 [1917]). Mourning and Melancholia. In *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vol. XIV. Trans. James Strachey (pp. 243–58). London: Hogarth Press.
- General Social Survey (2010). gss.norc.org.
- Graves, R. (1954). *The Golden Ass*. New York: Penguin.
- Guthrie, S. (1993). *Faces in the Clouds*. Oxford: Oxford University Press.
- Hall, D. (2006). Religious attendance: More cost-effective than Lipitor? *Journal of the American Board of Family Medicine*, 19, 130–9.
- Holt-Lunstad, J., Smith, T. B. & Layton J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLOS Medicine*, 7(7), e1000316.
- Hummer, R., Rogers, R., Nam, C. & Ellison, C. (1999). Religious involvement and US adult mortality. *Demography*, 36, 273–85.

- Jones, R. J. (1981). Robertson Smith, Durkheim and sacrifice: An historical context for the elementary forms of the religious life. *Journal of the History of the Behavioral Sciences*, 17, 184–205.
- Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. *American Economic Review*, 93, 1449–75.
- Kierkegaard, S. (1948 [1847]). *Purity of Heart*. Trans. D. V. Steere. New York: Harper.
- Koenig, H. & Cohen, H. J. (Eds.) (2002). *The Link Between Religion and Health*. New York: Oxford University Press.
- Koenig, H., Smiley, M. & Gonzalez, J. A. (1988). *Religion, Health and Aging*. Westport, CT: Greenwood Press.
- Lamott, A. (2012). *Thanks, Help, Wow*. London: Riverside Books.
- Levi-Strauss, C. (1963). The effectiveness of symbols. In *Structural Anthropology* (pp. 186–205). New York: Basic Books.
- Levinson, S. (2006). On the human interaction engine. In S. Levinson and N. Enfield (Eds.), *The Roots of Human Sociality* (pp. 39–69). London: Berg.
- Lewis, C. S. (1980). *Mere Christianity*. New York: Penguin.
- Loyola, I. (1992). *The Spiritual Exercises*. Trans. Joseph Tetlow. New York: Crossroads.
- Luhrmann, T. M., Nusbaum, H. & Thisted, R. (2010). The absorption hypothesis. *American Anthropologist*, 112, 66–78.
- Luhrmann, T. M. (2012). *When God Talks Back*. New York: Knopf.
- Luhrmann, T. M. (2013). Making God real and making God good: Some mechanisms through which prayer may contribute to healing. *Transcultural Psychiatry*, 50, 707–25.
- Luhrtmann, T.M. (2017). Knowing God. *Cambridge Anthropology*, Autumn, 125–42.
- Malcolm, J. (1981). *The Impossible Profession*. New York: Knopf.
- Mascaro, J. (Trans.) (1965). *The Bhagavad Gita*. Baltimore: Penguin.
- Pennebaker, J. (1989). Confession, inhibition and disease. *Advances in Experimental Social Psychology*, 22, 211–44.
- Powell, L., Shahabi, L. & Thoresen, C. (2003). Religion and spirituality: Linkages to physical health. *American Psychologist*, 58, 36–52.
- Reichard, G. (1944). *Prayer: the Compulsive Word*. Seattle: University of Washington Press.
- Schjoedt, U., Stødkilde-Jørgensen, H., Geertz, A. W. & Roepstorff, A. (2009) Highly religious participants recruit areas of social cognition in personal prayer. *SCAN*, 4, 199–207.
- Sharp, S. (2010). How does prayer help manage emotions? *Social Psychology Quarterly*, 73, 417–37.
- Tellegen, A. & Atkinson, G. (1974). Openness to absorption and self altering experiences (“absorption”), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 83, 268–77.
- Weil, S. (2002 [1952]) *Gravity and Grace*. New York: Routledge.
- Zaleski, P. & Zaleski, C. (2005). *Prayer: A History*. Boston: Houghton Mifflin.