

ALSO BY ROBERT WRIGHT

The Evolution of God

Zero: The Logic of Human Destiny

Why Psychology and Everyday Life

Gods and Their Gods: Looking for

Meaning in an Age of Information

Why Buddhism Is True

*The Science and Philosophy of
Meditation and Enlightenment*



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particular reason to consider some
your 'self' or maybe anything else
wrote that—in a book called *Why*
and the Modular Mind—he
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The Mental Modules That Run Your Life

When I was a freshman in college, I learned that I had an intertemporal utility function. This wasn't a diagnosis; "intertemporal utility function" isn't a malady. It's something everybody has. It's an equation that describes, roughly speaking, your willingness to delay gratification—your willingness to forgo something you like in order to have more of that something later.

So, for example, I might be willing to give up \$100 in wages today if I could be guaranteed that I'd get \$125 a year from now. But my friend, whose intertemporal utility function is calibrated differently, might demand \$150 a year from now in exchange for giving up \$100 now.

This is also called "time discounting." People tend to "discount" the future in the sense of feeling that getting \$100 a year from now isn't as good as getting \$100 today. In the example above, my friend discounts the future more steeply than I do.

Anyway, according to the models presented in my economics class, however my intertemporal utility function was calibrated—however steep my time discounting—it would stay that way tomorrow and next week and next month and next year. My discount rate was said to be a firm and enduring feature of my psychology.

I think the Buddha would have been skeptical of this claim. He tended not to see things as enduring—certainly not things that are part of a person's psychology. I think if he had been my college classmate, he would have stood up during an econ lecture and said, "What do you think of this, O monks? Are mental formations permanent or impermanent?"

Actually, he might not have been quite that disruptive. But according to Buddhist scripture, he did say that very thing in another setting. It was during one of his not-self sermons. In fact, it was during his very first and most famous discourse on not-self, the one we looked at in chapter 5. In that chapter and chapter 6, I focused mainly on only one part of the Buddha's basic not-self argument: the idea that the "five aggregates" are not under your control; they do not, as he later put it, bear the relationship to you that a king's domain bears to a king.

The other big part of the Buddha's not-self argument, the part I touched on only lightly, was about flux, impermanence. After he asks the monks "Are mental formations permanent or impermanent?" he gets the predictable reply: "Impermanent, O Lord."

Well, the Buddha goes on to ask, does it make sense to say of impermanent things "they are mine, this I am, this is my self"?

"Indeed, not that, O Lord."

The Buddha then goes through the same drill with the other four aggregates. He insists, in each case, that something subject to change shouldn't be thought of as part of the self. He doesn't explicitly say why.[†] And to provide the fullest explanation, we'd need to delve into ideas about the self that were circulating in his day. But certainly, leaving his intellectual context aside, there's a kind of commonsense appeal

to his argument: [We do tend to value something enduring, something that goes from children to adults to senior citizens.]

But in fact, of course, we change. [The process of changing from children to adults to seniors is not on a moment-by-moment basis.] And sometimes things that are commonly thought to be enduring are not.

Which brings us back to the research. Psychologists have found that if you find something attractive, their intertemporal discounting is lower. They discount the future, change their preferences. They want cash in the near term—yes, they want money—for a bigger amount of money.

Why would someone's behavior change when looking at pictures of women? The research seems to involve the mental models of the women. More broadly, the psychological research that Buddhist thought calls into question is described partly as the workings of the mind. The research helps illuminate a core part of the Buddhist teaching: accepting that your self isn't independent, that you don't exist, can put your self—or someone else's—into perspective.

This time-discounting experiment is one of the experiments in which psychologists have shown that people then see how their inclination to discount the future is as it was in this experiment: something that is a pretty firm feature of a person's psychology.

For example: Do you tend to travel less? Correct answer: yes. Marketing Research suggests that the impact of advertising is increased by matching their sales to the interests of consumers. Advertisers showed different success

to his argument: [We do tend to think of the self—the inner, real me—
as something enduring, something that persists even as we grow from
children to adults to senior citizens.]

But in fact, of course, we change. And we don't just change in the
sense of changing from children into adults. We change on a moment-
by-moment basis.] And sometimes we change along dimensions that
are commonly thought to be constants.

Which brings us back to my intertemporal utility function. Psy-
chologists have found that if you show men pictures of women they
find attractive, their intertemporal utility function, the rate at which
they discount the future, changes. They become less willing to forgo
cash in the near term—yes, the experimenters offered them real
money—for a bigger amount of cash farther down the road.

Why would someone's basic financial philosophy change after
looking at pictures of women? We'll get to that. But here's a clue: it
seems to involve the mental modules discussed in the previous chapter.
More broadly, the psychological flux, the impermanence, that in Bud-
dhist thought calls into question the existence of the self can be de-
scribed partly as the workings of those modules. Seeing things in these
terms helps illuminate a core paradox of Buddhist meditation practice:
accepting that your self isn't in control, and may in some sense not even
exist, can put your self—or something like it—in control.

This time-discounting experiment belongs to a genre of experi-
ments in which psychologists manipulate people's states of mind and
then see how their inclinations change. Often the takeaway is the same
as it was in this experiment: something you might have thought was a
pretty firm feature of a person's mind is in fact not so firm.

For example: Do you tend to follow the crowd or take the road
less traveled? Correct answer: It depends! A study in the *Journal of*
Marketing Research suggested ways for advertisers to increase their
impact by matching their sales pitch to its media context. The experi-
menters showed different subjects clips from different movies, either

the terrifying movie *The Shining* or the romantic movie *Before Sunrise*. People in each group then saw one of two ads for an art museum. In the first ad the pitch line was “Visited by over a Million People Each Year.” In the second the pitch line was “Stand Out from the Crowd.”

People who had been watching *The Shining* felt more favorably about the museum, and more inclined to visit it, when given the first pitch, presumably because a state of fear inclines you to see crowds as safe havens. People who had been watching *Before Sunrise* had the opposite reaction, perhaps because feeling romantic inclines you toward a more intimate environment.

This may not seem earthshaking. We all know that we behave differently when in different moods, so it stands to reason that putting us in a romantic mood would change our behavior. But the people who did this study don't think that the “moods” paradigm is the best one to use here. Douglas Kenrick and Vladas Griskevicius, two of the psychologists who collaborated on the study, see us each as having multiple “subelves”—or modules, as Kenrick sometimes calls them—and they think that in this case which movie you watch determines which sub-self, or module, controls your reaction to the ad. The romantic movie puts your “mate-acquisition” module in charge. The scary movie puts your “self-protection” module in charge.

I can imagine the Buddha liking this kind of language. The alternative way of describing the situation—saying that “I” act differently when in different “moods”—is just a way of evading the question he seems to have been asking: If you have different preferences from one moment to the next, then in what sense is it the same “you” from moment to moment? (Isn't this image of you exchanging one mood for another just a way of covering up the fact that today's you and tomorrow's you aren't really the same you?)

We could argue that one all day. But it's worth noting that over the past two decades a fair number of psychologists have come to agree with Kenrick and Griskevicius—and Kurzban and Gazzaniga from the

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previous chapter—that the dynamics of the mind are well captured by a modular model. In this view, if you built a robot whose brain worked like the human brain, and then asked computer scientists to describe its workings, they’d say that its brain consists of lots of partly overlapping modules, and modules within modules, and the robot’s circumstances determine which modules are, for the moment, running the show. These computer scientists would have trouble pointing to a part of the robot’s programming and saying, “This part is the robot itself.”

The closest thing to a self would be the algorithm that determines which circumstances put which modules in charge. And that algorithm can’t be what we mean by the “conscious self” in humans—the CEO self—because humans don’t consciously decide to go into romantic mode or fearful mode. Indeed, if a psychologist told experimental subjects that they’d responded to a movie by changing their reactions to ad pitches, or that they’d responded to pictures of women by changing their time-discounting rate, they’d probably be surprised.

So if the conscious self isn’t the thing that changes our channels, putting a new module in charge, what is? Well, the activation of modules is closely associated with feelings. *The Shining* makes you feel fearful, and this fear seems to have played a role in activating the self-protection module, with its tendency to seek shelter in a crowd. *Before Sunrise* activates feelings of romance, and these feelings seem to have invoked the mate-acquisition module, with its inclination toward intimacy.

This idea—that modules are triggered by feelings—sheds new light on the connection between two fundamental parts of Buddhism: the idea of nonattachment to feelings and the idea of not-self. We’ve already seen one kind of connection: when you let go of a feeling by viewing it mindfully, you’re letting go of something you had previously considered part of your self; you are chipping away at the self, bit by bit. But now we see that calling this a “chipping away” may understate

the magnitude of what you're doing. Feelings aren't just little parts of the thing you had thought of as the self; they are closer to its core; they are doing what you had thought "you" were doing: calling the shots. It's feelings that "decide" which module will be in charge for the time being, and it's modules that then decide what you'll actually do during that time. In this light, it becomes a bit clearer why losing attachment to feelings could help you reach a point where there seems to be no self.

Jealousy: Tyrant of the Mind

Sometimes the feeling-module connection is so powerful as to be unmistakable: the feeling itself is overwhelming, and the module it invokes is plainly transformative. Consider sexual jealousy, as analyzed by Leda Cosmides and John Tooby. Cosmides and Tooby, who did as much as anyone to lay the foundations of evolutionary psychology in the 1980s and 1990s, were early and influential advocates of a modular view of the mind. As their thinking developed, they took up the question of how mental modules are connected to emotions. They concluded that what emotions do—what emotions are *for*—is to activate and coordinate the modular functions that are, in Darwinian terms, appropriate for the moment. (This isn't, of course, to say that these functions are appropriate in moral terms, or even that they serve the welfare of the person they steer, but just that they helped our ancestors spread genes.) Tooby and Cosmides used jealousy as an example:

The emotion of sexual jealousy constitutes an organized mode of operation specifically designed to deploy the programs governing each psychological mechanism so that each is poised to deal with the exposed infidelity. Physiological processes are prepared for such things as violence. . . . The goal of deterring, injuring, or murdering the rival emerges; the goal of punishing, deterring, or deserting the mate appears; the desire

to make oneself more competitive emerges; memory is used for confident assessments of the rival's status; the general estimate of the rival's status is the opposite sex (or indeed the rival's status) shame programs may be triggered which the individual can punish or punishment that work to reduce the social perception of weakness.

That's a lot of stuff! Indeed, it's not just the person's attitude, focus, disposition, or self that has emerged and seized control. In the 17th century, John Dryden wrote of "The Tyrant Mind"—and that is indeed the tyrant. At least, your mind's unquestionable power. In a jealous rage can attest that at that moment, it wasn't the

The feeling of jealousy is so powerful that you find yourself resisting it. But resistance is not the way of dealing with jealousy any more than the feeling mindfully as it begins to take hold. If you don't yield to the feeling, Buddha might say, let your consciousness observe the feeling—then the jealousy module will be serving feelings without attaching itself to them. Seizing control of your consciousness is the way to deal with the feeling.

Should you succeed in resisting the feeling, you needn't leave you incapable of dealing with the rival. Reflect on the fact of your mind's power. If you should end your relationship with the rival, you'll be better able to deal with the

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to make oneself more competitively attractive to alternative mates emerges; memory is activated to re-analyze the past; confident assessments of the past are transformed into doubts; the general estimate of the reliability and trustworthiness of the opposite sex (or indeed everyone) may decline; associated shame programs may be triggered to search for situations in which the individual can publicly demonstrate acts of violence or punishment that work to counteract an (imagined or real) social perception of weakness; and so on.

That's a lot of stuff! Indeed, it's so much stuff—so much change in a person's attitude, focus, disposition—that you might say a whole new self has emerged and seized control of the mind. In the seventeenth century, John Dryden wrote a poem titled "Jealousy: Tyrant of the Mind"—and that is indeed the way it works; jealousy is, for a time at least, your mind's unquestioned ruler. Certainly anyone who has been in a jealous rage can attest that, whoever was in charge of your behavior at that moment, it wasn't the ordinary you.

The feeling of jealousy is so powerful that it may be hard to imagine resisting it. But resistance, strictly speaking, isn't the mindful way of dealing with jealousy anyway. Rather the idea would be to observe the feeling mindfully as it begins to emerge and so never become firmly attached to it. If you don't yield to attachment—if you don't, as the Buddha might say, let your consciousness become "engaged" with the feeling—then the jealousy module presumably won't be activated. Observing feelings without attachment is the way you keep modules from seizing control of your consciousness. Easier said than done, I know.

Should you succeed in severing your attachment to jealousy, this needn't leave you incapable of dealing with the situation. You can still reflect on the fact of your mate's infidelity and decide whether it means you should end your relationship. But without surrendering to jealousy, you'll be better able to determine whether the infidelity is a fact,

better able to decide on a wise course of action, and, in any event, less likely to kill somebody.

Again, jealousy is a particularly dramatic example of a module's seizing control of the mind. Whenever people are throwing things and screaming, that's a tipoff that the brain is under new management. And even when jealousy isn't in its rage phase, it has a conspicuously obsessive quality, compelling your mind to take particular trains of thought over and over.

But even subtler emotions, with less obvious effects, can bring enough little changes to usher in a whole new frame of mind. Consider, again, the experiment in which watching a romantic movie made people crowd-averse. This reaction by itself is hardly transformative, but then again, "by itself" isn't the way it happens; it's one of various changes ushered in by the triggering of what Kenrick and Griskevicius call the "mate-acquisition subself."

Which brings us back to the intertemporal utility function and, specifically, the fact that men who see women they consider attractive tend to discount the future more steeply than they did only moments earlier. What is going on here? Is this another part of the hypothesized mate-acquisition module?

Margo Wilson and Martin Daly, who conducted this time-discounting study (and who, like Tooby and Cosmides, were pioneers in evolutionary psychology), were inspired to do the experiment by their reflections on the history of our species. There is good reason to believe that during evolution men with access to resources (such as food) and with high social status were better able to attract mates. So if there is indeed a mate-acquisition module, you'd expect it to feature the following algorithm: men who see signs of a near-term courtship opportunity take advantage of any near-term resource acquisition opportunities, even if that means forgoing more distant opportunities. They want their resources—which, in a modern environment, means cash—now.

Of course, the men in these experiments just saw pictures; they just saw pictures. In a real environment there weren't photographs. The pictures would have signified the actual presence of women. The minds of the men in this experiment were not aware of the pictures, even though the men in the experiment were aware that women weren't available. So this is another reminder that modules are not the conscious self doing the triggering. The Darwinian logic behind this is that the conscious self is not the one who is doing the triggering.

Time discounting isn't the only way that the mate-acquisition mode, can turn out. You'd think that people's care would be to *some* change over time, would be fluctuating. But apparently the men who fill out surveys about time discounting in a room where women were present, and men who fill them out in an all-male room, were more inclined to discount the future. It turned out, were more inclined to discount the future, an important goal.

This may not have signified anything. Maybe the mate-acquisition module was just briefly activated. In other words, maybe the presence of a heterosexual man to wow them was not a goal, regardless of how realistic the goal was. But if so, the men's conscious minds were not aware of the strategic logic. After all, these men were given a questionnaire they had no reason to believe was about time discounting.

We're back to the moral of the story: the conscious mind is capable of convincing themselves that the goal is in their interest. The motivation it's in their interest.

Of course, the men in these experiments didn't see real mating opportunities; they just saw pictures of women. But in the ancestral environment there weren't photographs, so any realistic image of a woman would have signified the actual presence of a woman. That's why the minds of the men in this experiment could be "fooled" by mere pictures, even though the men "knew," at a conscious level, that these women weren't available. So this experiment is, among other things, another reminder that modules can get triggered not only without the conscious self doing the triggering but also without it having a clue as to the Darwinian logic behind the triggering.

Time discounting isn't the only psychological feature that, in mate-acquisition mode, can turn out to be more fluid than you might imagine. You'd think that people's career aspirations, though obviously subject to *some* change over time, wouldn't do a lot of moment-by-moment fluctuating. But apparently they do. In one study, psychologists had men fill out surveys about their career plans; some filled them out in a room where women were also filling out forms, and some filled them out in an all-male room. Men placed in the presence of women, it turned out, were more inclined to rate the accumulation of wealth as an important goal.

This may not have signified an actual shift in their aspirations. Maybe the mate-acquisition module wasn't changing long-term plans but was just briefly activating a "self-advertisement" submodule. In other words, maybe the presence of women prepares the mind of a heterosexual man to wow them by sharing bold plans for future wealth, regardless of how realistic the plans are or how long the boldness will last. But if so, the men's conscious selves don't seem to be privy to this strategic logic. After all, these men were conveying these bold plans via a questionnaire they had no reason to believe the women would read.

We're back to the moral of the split-brain experiments: people are capable of convincing themselves of whatever stories about their own motivation it's in their interest (or their "interest" as defined by natural

selection) to tell others. Only these aren't split-brain patients; these are anatomically normal human beings, governed by a mind as it naturally works. Or, at least, governed by the part of the mind that's in charge at that moment.

So we have three things that can change about people who sense a mating opportunity: they can become crowd-averse, suddenly partial to intimate environments; their intertemporal utility function can get recalibrated; and their career goals, at least for the time being, can become more materialistic.[†] These three changes hardly exhaust the list of things that can happen to a person's mind in mating mode. But already you can see why it's tempting to think that a module—or a “sub-self,” as Kenrick and Griskevicius put it—takes control of the mind when people are in the presence of a potential mate who strikes them as attractive.

Messy Modules

At the same time, we should stay mindful of the mind's messiness and not get overly enamored of the modular metaphor. And Kenrick and Griskevicius sometimes sound pretty enamored. They divide the mind neatly into seven “subselves” with the following missions: self-protection, mate attraction, mate retention, affiliation (making and keeping friends), kin care, social status, and disease avoidance. This taxonomy has its virtues; these seven areas of mental functioning no doubt got a lot of emphasis from natural selection as it designed the mind. Still, you don't have to look at this list for long before you are reminded that drawing clean lines between modules is hard.

For example, when the men in that career survey study gilded their career goals, that could be described as trying to attract a mate, but it could also be described as elevating their status in the eyes of a potential mate; moreover, it's the kind of thing they might do to elevate their status in the eyes of someone who *isn't* a potential mate. So should we

think of the mate-acquisition module? Or should we think of it as showing some functionality to another module that Kenrick and Griskevicius call “T”? This is one reason I warned against thinking of the mind as a collection of modules, like a knife or a smartphone.

Another problem with the modular metaphor is that the boundaries among modules can be subjective. One module can be a sub-module of another. Though “mate-acquisition” is a thing, the feeling that triggers it is another thing, the feeling that triggers it is another feeling that triggers jealousy, and so on. There may be just a sense of self in the ensuing state of mind type. Still, it is a distinct state of mind.

If, in light of the misleading nature of the phrase “control,” I prefer the phrase I just used—“a state of mind that the self doesn't control,” that's fine. Either way, “control” isn't a state of mind that the self controls. The state is triggered by a feeling, and the principle has access to the state. The new state *has* been entered. (1) You can see why “control” is *impermanent*, the various principles that have entered this flux relevant to the state. There may be some unchanging essence of self that self would be amid the flux. Still, it is a state of mind.

Indeed, if there is some flux, something that really *is* a state of mind, that something is an *event*, a king, and that “I”—the *self*—is the *flux*. In the previous chapter that this illusion

think of the mate-acquisition module as having a “social status” sub-module? Or should we think of the mate-acquisition module as borrowing some functionality that resides in the separate “social status” module that Kenrick and Griskevicius posit? This kind of conundrum is one reason I warned against thinking of the mind as a Swiss Army knife or a smartphone.

Another problem with the smartphone metaphor is that shifting among modules can be subtler than switching from one app to another. Though “mate-acquisition mode” sounds like a pretty distinct thing, the feeling that triggers it needn’t be nearly as dramatic as the feeling that triggers jealousy. There may be no inkling of love or lust; there may be just a sense of heightened attraction and interest. Nor is the ensuing state of mind typically as jarring as a jealous state of mind. Still, it is a distinct state of mind, and it is brought on by a feeling.

If, in light of the misleading neatness of the module metaphor, you prefer the phrase I just used—“state of mind”—to “module that’s taken control,” that’s fine. Either way, two take-home lessons hold: (1) This isn’t a state of mind that the conscious “self” “chooses” to enter; rather, the state is triggered by a feeling, and the conscious “self,” though in principle has access to the feeling, may not notice it or notice that a new state *has* been entered. (So much for the idea of the conscious you as CEO.) (2) You can see why the Buddha emphasized how fluid, how impermanent, the various parts of the mind are, and why he considered this flux relevant to the not-self argument; if the self is supposed to be some unchanging essence, it’s pretty hard to imagine where exactly that self would be amid the ongoing transitions from state of mind to state of mind.

Indeed, if there is something that qualifies as a constant amid the flux, something that really *does* endure, essentially unchanged, through time, that something is an illusion: the illusion that there is a CEO, a king, and that “I”—the conscious I—am it. We saw in the previous chapter that this illusion makes sense in evolutionary terms. The

Messy Modules

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conscious I is the I that speaks, the I that communicates with the world, so it gets access to perspectives whose purpose is to be shared with the world. These perspectives include the sense that there is an executive self, and that it is a pretty damn effective and upstanding executive self at that! In this chapter we've seen how that conscious mind, in addition to hosting this one persistent illusion, also gets access to other, more transient illusions—about career ambitions, say—depending on which feeling puts which module in charge and what perspective that module wants to share with the world.

It may seem that such illusions aren't worth getting up in arms about. What's wrong with men and women indulging in self-delusion in the course of trying to impress each other? Nothing, I guess. Some illusions are harmless, and some are even beneficial. Far be it from me to try to talk you out of all your illusions. By and large, my philosophy is *Live and let live*: if you're enjoying the Matrix, go crazy.

Except, maybe, when your illusions harm other people in your life or contribute to larger problems in the world. And that can happen. Being in self-protection mode, for example, does more than just give us an attraction to crowds. In one study, men who watched part of a scary film (*The Silence of the Lambs*) and were then shown photos of men from a different ethnic group rated their facial expressions as much angrier than did men who hadn't seen a scary film.

Of course, you can imagine this kind of illusion, this exaggeration of menace, coming in handy. If you're walking through an unfamiliar neighborhood, erring on the side of caution by exiting the neighborhood may conceivably pay off. On the other hand, this tendency to exaggerate the hostility of certain kinds of strangers could keep you from having a constructively friendly interaction with someone of a different ethnicity. What's more, the stakes are sometimes higher than the fate of one person walking through an unfamiliar neighborhood. Politicians activate this same mental tendency to get us to "overread" threats in ways that lead to war or ethnic antagonism.

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Buddhist thought and m

And as for the mate-acquisition module, it doesn't just encourage us to get away from the crowd and find an intimate bistro; it structures the conversation that takes place in that bistro. It may, for example, encourage us to say unflattering things about any perceived rivals for the affection of the person across the table. And this deflation of rivals is no closer to the truth than the self-inflation that is also high on the agenda for that particular conversation. But the deflation is heartfelt; we tend to believe the bad publicity we give rivals, the better to spread it.

The Buddha seems to have seen this dynamic clearly. A scripture attributed to him reads:

*The senses' evidence,
And works, inspire such scorn
For others, and such smug
Conviction he is right,
That all his rivals rank
As "sorry, brainless fools."*

So what do we do about all this? If our mind keeps getting seized by different modules, and each module carries with it different illusions, how do we change the situation? The answer isn't simple, but what should already be clear is that getting more control over the situation may have something to do with feelings. A link between feelings and illusion was somewhat apparent back in chapter 3, when I noted that some feelings are in one sense or another "false," so getting some critical distance from them can clarify things. But the case against being enthralled by our feelings only grows when you realize that their connection to illusion can be described in a second way. Feelings don't just bring specific, fleeting illusions; they can usher in a whole mindset and so alter for some time a range of perceptions and proclivities, for better or worse.

Buddhist thought and modern psychology converge on this point:

in human life as it's ordinarily lived, [there is no one self, no conscious CEO, that runs the show; rather, there seem to be a series of selves that take turns running the show—and, in a sense, *seizing* control of the show] If the way they seize control of the show is through feelings, it stands to reason that one way to change the show is to change the role feelings play in everyday life. I'm not aware of a better way to do that than mindfulness meditation.



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8

How Thoughts Think Themselves

You know the old saying about Zen meditation, Tibetan meditation, and Vipassana meditation? Well, no, you probably don't. It's a saying that's meant to capture the difference between these three Buddhist contemplative traditions—Vipassana, with its emphasis on mindfulness; Tibetan, which often steers the mind toward visual imagery; and Zen, which sometimes involves pondering those cryptic lines known as koans. Here's the saying: [Zen is for poets, Tibetan is for artists, and Vipassana is for psychologists.]

Like most stereotypes, this one exaggerates contrasts, but it does contain a valid point: [Mindfulness meditation, the main vehicle of Vipassana, is a good way to study the human mind.] At least, it's a good way to study *one* human's mind: yours. You sit down, let the mental dust settle, and then watch your mind work.

Strictly speaking, of course, this isn't what psychologists do. Psy-

chology is a science, and sciences, by definition, generate publicly observable data, experimental results that are out there for all to see. In contrast, the things you see when you watch your mind can't be seen by anyone but you. They're not data in the strict sense, so when you're meditating you're not being an experimental psychologist. If you emerge from a meditative state and declare that the self doesn't exist, that's not scientific evidence that the self doesn't exist.

No, if anything, the relationship between science and meditation works the other way around. It's not that meditative observations about your mind validate theories, but more that theories can help validate meditative observations about your mind. [If during meditation you see things that are consistent with credible scientific models of how the mind works, that gives you a bit more reason to believe that, indeed, meditation is helping you see the dynamics of your mind clearly.]

Take the modular model of the mind, for example. There is good scientific reason to take it seriously. Well, if this modular model is truly an accurate picture of the mind, and if Vipassana meditation—insight meditation—indeed gives us insights into the workings of the mind, then you might expect this kind of meditation to give us glimpses of a modular mind at work.

I think it does. I think some of the experiences people have during mindfulness meditation make particular sense in light of a modular model of the mind. And I'm not just talking about epic experiences—epiphanies you might have after months of seclusion and meditation, such as the sudden realization that there's no self in there. I'm also talking about experiential steps on the meditative path that might eventually lead to such epiphanies but are much more common.

One of these steps is the most widely shared meditative experience of all: finding it really hard to meditate because your mind refuses to stay in one place. As I've already suggested, to see that your mind is wandering is to see part of what the Buddha meant when he challenged conventional conceptions of the self; if a CEO-self

existed, then presumably the focus on the breath when together and see that observing to watch it as the default mode suggest that the conscious "y light on what is running the strikingly consistent with the

To see what I mean, just focus on a cushion; (2) try to focus (est) fail to focus on your breath thoughts are making you fail. your age and other factors, but wandering would be:

1. Imagining what it would be like to be a meditative man or woman you met in the witty or endearing thing he or she said to her.
2. Reflecting on the encounter and wondering if his or her behavior was significant.
3. Reflecting on an encounter that was particularly meaningful.
4. Briefly indulging in a reverie about a public embarrassment that you were unworthy of.
5. Imagining what it's going to be like to win the beer you so richly deserve and the demise of rivals.
6. Reminiscing about that gap in the tenth hole yesterday and how your partners rightly were—no matter how you made afterward and the

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existed, then presumably the mind would obey its commands and
focus on the breath when told to. Now we're in a position to go fur-
ther and see that observing your mind in this unruly stage—trying
to watch it as the default mode network rages on—can do more than
suggest that the conscious "you" isn't running the show; it can shed
light on what *is* running the show, revealing a picture of the mind
strikingly consistent with the modular model.

To see what I mean, just follow these four easy steps: (1) sit down
on a cushion; (2) try to focus on your breath; (3) (this step is the easi-
est) fail to focus on your breath for very long; (4) notice what *kinds* of
thoughts are making you fail. These thoughts can vary depending on
your age and other factors, but some good examples of common mind
wandering would be:

1. Imagining what it would be like to go on a date with the attrac-
tive man or woman you met at your workplace—maybe imagining
the witty or endearing things you'd say, the way you'd impress him
or her.
2. Reflecting on the encounter you had with him or her yesterday,
and wondering if his or her words signified what you hope they
signified.
3. Reflecting on an encounter in which a rival subtly dissed you.
4. Briefly indulging in a revenge fantasy in which said rival suffers a
public embarrassment that reveals to all his or her baseness and
unworthiness.
5. Imagining what it's going to be like when you get home and have
the beer you so richly deserve after a hard day of fantasizing about
the demise of rivals.
6. Reminiscing about that great approach shot you hit on the eigh-
teenth hole yesterday and recalling how impressed your playing
partners rightly were—not to mention the casually witty remark
you made afterward and the laughter it elicited.

7. Worrying about the PowerPoint presentation you've got to give tomorrow.
8. Worrying about your daughter in preschool or feeling guilty about not having called your aging mother yesterday.
9. Being annoyed that your so-called friend couldn't do you a favor of the sort you routinely do for him or her.
10. Looking forward to the upcoming dinner with another friend at which you can vent about the first "friend." And so on.

There are three recurring themes here. [First, these thoughts involve the past and future, not the present] the one thing you're not doing while having these thoughts is paying attention to what's actually going on in the real world at this moment. Second [all of these thoughts involve you] By default, we think mainly self-referential thoughts. This is unsurprising, given that natural selection designed the brain to focus on our interests (at least, our "interests" as natural selection defined them). Third [most of these thoughts involve other people.] This too is unsurprising, given what social animals people are. Indeed, it turns out there's a fair amount of overlap between the default mode network and what brain scans have identified as the "theory of mind network"—the part of the brain involved in thinking about what other people are thinking.

There's also a fourth theme here, a fourth thing that almost all of these mental meanderings have in common. Can you spot it?

Hint: What were the previous two chapters of this book about? Exactly! Modules! Though the trains of thought that carry you away from direct experience can take you to lots of different places, pretty much all of those places seem to lie within the province of one of the sort of mental modules I've already described. Which is to say, modules that make perfect sense in evolutionary terms: modules that deal with attracting mates, keeping them, enhancing your status (which can mean derogating rivals), taking care of kin, tending to your friendships

(which includes making sure you're not getting exploited), and so on.

The one glaring exception doesn't seem to fit naturally. It's going forward to that beer you didn't build a "beer-drinking" module for. Other recreational drugs, is it? The logic: [it taps directly into the brain's reward system, activated more arduously, but it spreads their genes.]

When your mind is wandering, it's wandering—like it's strolling through a field, sampling them, indulging in them, moving on to another one. But actually, the different modules are competing when the mind "wanders" from one to another. What's happening is that the second module is trying to wrestle control of your consciousness.

Far be it from me to insist on the value of ways of looking at mind wandering. (1) Psychologists who adhere to the first view toward the second view—the idea that the brain is made up of modules so much as being a collection of modules vailed over competing modules. In chapter 6, "won the prize of consciousness." Vipassana meditation retreats. When you focus on your breath, you will probably find that the hypothesis: it will seem more like a module within its own terrain so much as being a collection of modules.

And eventually these wandering thoughts are attempted hijackings. Though you can resist attention for quite so long before you're hijacked.

(which includes making sure they are reciprocal and that you're not getting exploited), and so on.

The one glaring exception—the one thought in the list above that doesn't seem to fit naturally into a major module—is number 5: looking forward to that beer you so richly deserve. Presumably, evolution didn't build a "beer-drinking module" into us. But beer, like many other recreational drugs, is an invention that circumvents evolution's logic: [it taps directly into the reward center that normally would be activated more arduously, by doing things that helped our ancestors spread their genes.]

When your mind is wandering, it may feel like, well, like your mind is wandering—like it's strolling along the landscape of modules and sampling them, indulging one module for a while, then eventually moving on to another one. But another way to describe it is to say that, actually, the different modules are competing for your attention, and when the mind "wanders" from one module to another, what's actually happening is that the second module has acquired enough strength to wrestle control of your consciousness away from the first module.

Far be it from me to insist that you accept one or the other of these ways of looking at mind wandering. For now I'd just make two points: (1) Psychologists who adhere to the modular model of the mind tend toward the second view—the idea that the conscious you isn't choosing modules so much as being commandeered by modules that have prevailed over competing modules and thus, as Gazzaniga put it in chapter 6, "won the prize of conscious recognition." (2) If you do go on a Vipassana meditation retreat and slowly, haltingly, get better at focusing on your breath, you will probably lean increasingly toward the second hypothesis: it will seem more and more like your mind isn't wandering within its own terrain so much as being hijacked by intruders.]

And eventually these won't seem so much like hijackings as attempted hijackings. Thoughts will arise, but they won't hold your attention for quite so long before you return to your breath; they'll fail to

carry you away; the train will pull into the station, and you'll watch it leave without ever getting on it.

Actually, I shouldn't have written that last sentence with such authority—as if I often watch, with utter detachment, whole trains of thought pull into the station and then leave. My typical experience is more like getting on the train and then, after it's left the station and is picking up speed, realizing I don't want to be on it and jumping off.

This has been something of a frustration for me. On the one hand, I've gotten reasonably good at *vic*iewing my *feelings* with some objectivity—actually watching them arise as if I were watching some character walk on stage. (At least, I'm pretty good at this while meditating; in everyday life my record is more mixed.) But I find it harder to view my *thoughts* with such detachment. To put my problem another way: Remember when Gazzaniga said that the thought you're conscious of at any given moment is the thought that comes “bubbling up”? Well, I've had trouble seeing the “bubbling up” part. So if you want a vivid description of that, you should listen to someone other than me. Joseph Goldstein, for example.

In 1975, Goldstein, along with Sharon Salzberg and Jack Kornfield, cofounded the Insight Meditation Society, where I did my first meditation retreat back in 2003. All three had traveled to Asia as young adults; all three encountered Vipassana teachings there; and all three have become important figures in Western Buddhism, teaching and writing prolifically. Goldstein's seminal 1976 book, *The Experience of Insight*, makes him a good person to talk to about, well, the experience of insight. Once I pressed him to describe what it's like to watch your thoughts with detachment (or, as he prefers to put it, with nonattachment).

What It's Like to Watch Your Thoughts

One way to get the idea, Goldstein said, is to “imagine that every thought that's arising in your mind is coming from the person next to

you.” How would you be relating ~~that~~ you wouldn't be identifying ~~peering~~ and disappearing like ~~something~~ we're adding.”

I asked, “So, then, in meditation ~~thoughts~~ are just kind of coming ~~like~~ voices?”

“Yeah,” he answered.

I'm always happy to help someone. I added, “Although it's not like that.”

“Yeah, correct.”

I liked where this was heading. ~~thoughts~~, which we normally think of as ~~self~~, are *actually* directed *toward* ~~after~~ which we embrace the thought. ~~them~~, seemed consistent with the ~~outside~~ of consciousness and ~~was~~. So I pressed the point.

“Let me see if I have this right. ~~to~~ see that . . . whereas you're thinking thoughts—the ~~thoughts~~—it's closer to being ~~you~~ the thing you think of as ~~the~~.”

“Right.”

“They come from somewhere ~~brain~~.”

“Yes.”

So far so good. But then I said, “But whatever part ~~is~~ more like the captive of the ~~and~~ grab that—”

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atch Your Thoughts

to "imagine that every from the person next to

you." How would you be relating to these thoughts then? His point was that you wouldn't be identifying with them. "The thought itself is [ap- pearing and disappearing like a sound, but being identified with it is something we're adding.]"

I asked, "So, then, in meditation there can be the sense that thoughts are just kind of coming out of nowhere, so to speak, almost like voices?"

"Yeah," he answered.

I'm always happy to help sane people not sound like they're crazy, so I added, "Although it's not like you're hearing things . . . literally?"

"Yeah, correct."

I liked where this was heading. He seemed to be saying that thoughts, which we normally think of as emanating from the conscious self, are [actually directed toward what we think of as the conscious self, after which we embrace the thoughts as belonging to that self.] This, in turn, seemed consistent with the idea that modules generate thoughts outside of consciousness and somehow inject them into conscious- ness. So I pressed the point.

"Let me see if I have this right. During meditation, you can begin to see that . . . whereas you might have thought all your life that you're thinking thoughts—the thing you think of as 'you' is thinking thoughts—it's closer to being the case that the [thoughts try to capture you] the thing you think of as 'you.'"

"Right."

"They come from somewhere in your body, somewhere in your brain."

"Yes."

So far so good. But then I pressed the point too far for Goldstein's taste. I said, "But whatever part of the brain or body you think of as you is more like the captive of the thoughts; the thoughts try to reach out and grab that—"

"That's kind of an interesting way to describe it, and it certainly

feels like that. But I would phrase it a little differently. It's just that the thoughts are arising and there's a strong habit of mind to be identified with them. So it's not so much they have the *intent* to reach out and capture us, but rather there's this very strong habitual identification. This is how we've lived our lives, and it takes practice to try to break this conditioning, to be mindful of the thought rather than be lost in it."

This last point, this idea that [identifying with our thoughts is a habit that arose through "conditioning,] is one I'd quibble with. I think some of our more generic illusions—including, perhaps, the idea that "we" generate our thoughts—are pretty deeply built into us by natural selection; though they're influenced by life experiences, they're on balance closer to being instincts than bad habits, which explains why uprooting them is so hard.

But I digress. The essence of Goldstein's qualification I accept. I hadn't meant that thoughts literally *try* to capture our attention.

In fact, the modular model of the mind has led me to attribute less agency to thoughts than some meditation teachers do. Though these teachers are inclined to say that "thoughts think themselves," strictly speaking, I'd say modules think thoughts. Or rather, modules generate thoughts, and then if those thoughts prove in some sense stronger than the creations of competing modules, they become *thought* thoughts—that is, they enter consciousness. Still, you can see how, while observing the mind during meditation, it could seem like "thoughts think themselves"—because the modules do their work outside of consciousness, so, as far as the conscious mind can tell, the thoughts are coming out of nowhere.

Anyway, the main point these meditation teachers are making is the same as the upshot of the modular-mind model: the conscious self doesn't create thoughts; it *receives* them. And that reception, it seems, is the part of the process Goldstein had observed with much more objectivity and clarity than I'd been able to muster—the part

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After conveying to Goldstein that I hadn't meant that thoughts actually harbor a desire to capture our awareness, I asked whether, nonetheless, they sometimes seem like active things, not passive things. "In other words," I said, "they're actors in your consciousness that you've got to deal with, and you're in the habit of going along with them, but that's not necessary."

"Correct. And they become a lot less active when we see them for what they are. When we're not pulled into the drama of them. It's sort of like going to the movies. We go to the movies and there's a very absorbing story and we're pulled into the story and we feel so many emotions . . . excited, afraid, in love. . . . And then we sit back and see these are just pixels of light projected on a screen. Everything we thought is happening is not really happening. It's the same way with our thoughts. We get caught up in the story, in the drama of them, forgetting their essentially insubstantial nature."

[Escaping this drama—seeing your thoughts as passing before you rather than emanating from you—can carry you closer to the not-self experience, to that moment when you "see" that there is no "you" in there doing the thinking or doing anything else, that moment when what seems like a metaphysical truth is unveiled.] But, as we saw in chapter 5, some people say that the Buddha's original not-self teaching is [best seen not as a metaphysical truth but as a pragmatic strategy] regardless of whether a self exists, by jettisoning parts of what you think of as your self, you clarify your view of the world and become a better and happier person. And this pragmatic strategy of not-self, no less than the metaphysical discovery of not-self, would seem to be furthered by the kind of perspective Goldstein was describing.

As he put it, "When we have that basis of wisdom about the nature of thought, then we have more power to choose, okay, which thoughts are healthy . . . which thoughts are not so healthy—those we can let go."

So far, then, Vipassana meditation looks pretty good in light of the modular model of the mind. And it looks good at two very different stages on the meditative path: that first time on a cushion, when focusing on your breath seems hopeless, thanks to the intrusion of thoughts; and much later on the path, when, like Goldstein, you've acquired the ability to watch thoughts bubble into consciousness, sit there inertly, and then evaporate without carrying your mind away. In the first case—while struggling to focus—you see thoughts capture you, and in the second case you see them fail to capture you, but in both cases you realize that the thoughts aren't coming from "you," from your conscious self. So both experiences make sense if thoughts are in fact propelled into consciousness by modules that are themselves beyond the reach of conscious awareness. In other words: if the modular model is correct, then the view of thoughts afforded us by meditation is truer than the everyday, unreflective view, the view that has thoughts emanating from a CEO self.

And this isn't the end of the validation that Vipassana meditation gets from the modular model. Just as the mindful view of thoughts makes sense in light of this model, so does the mindful view of feelings. As we've seen, in the modular model, feelings are the things that give a module temporary control of the show. You see someone who inspires feelings of attraction, and suddenly you're in mate-acquisition mode, seeking intimacy, being exquisitely considerate, maybe showing off, and in other ways becoming a different person. You see a bitter rival, and the ensuing feelings lead you to seek something different from intimacy (though showing off, depending on the circumstance, may still be in order). It stands to reason that if these *feelings*—of attraction and affection, of rivalrous dislike—didn't get purchase in the first place, the corresponding modules wouldn't seize control. So one of the ideas behind mindfulness meditation—that gaining a kind of critical distance from your feelings can give you more control over which you is you at

any given moment—makes perfect sense in light of the modular model of the mind.

There's a subtler, more fine-grained connection between the modular model of the mind and the mindful view of thoughts while you're meditating. I've often had to read "pay really close attention to your breath" and think, "I can't focus on your breath because I'm paying close attention to this thought." This isn't a failure to meditate—but the thought that's happening is mindfulness meditation.

Anyway, here's what I've noticed: when I'm trying to focus on my breath, I often find myself attached to them. What's more, I often find myself, in other words, to keep me entertained. They're holding my attention away from those feelings. If you don't believe me, try focusing on your breath, and then try focusing on your breath (which shouldn't take long) while keeping you from focusing on anything other than whatever thought is distracting you. It's some feeling that is linked to the distraction.

Sometimes this connection is obvious because the feelings are so strong. For example, thinking about sleeping with your neighbor is sleeping with your neighbor. Thinking about what he or she deserves is what he or she deserves.

any given moment—makes perfect sense in light of the modular model of the mind.

What Fuel Propels Thoughts?

There's a subtler, more fine-grained, and, I admit, more speculative connection between the mindful view of feelings and the modular model of the mind. The first step to seeing it is to pay really close attention while you're meditating. I'm tempted to change that last sentence to read "pay really close attention while you're *failing* to meditate," because the part of meditation I'm talking about is the part when you can't focus on your breath because thoughts keep intruding. But if you're paying close attention to this "failure" to meditate, then, of course, it isn't a failure to meditate—because paying attention to whatever is happening *is* mindfulness meditation.

Anyway, here's what I've noticed about thoughts that intrude when I'm trying to focus on my breath [they often seem to have feelings attached to them] What's more, their ability to hold my attention—in other words, to keep me enthralled, to keep me from *noticing* that they're holding my attention—seems to depend on the strength of those feelings. If you don't believe me, just sit down, close your eyes, focus on your breath, and then, once you start failing to focus on your breath (which shouldn't take long!), try to focus on the things that are keeping you from focusing on your breath. And I don't mean just focus on whatever thought is distracting you—I mean see if you can detect some feeling that is linked to the thought that is distracting you.

Sometimes this connection between thought and feeling is obvious because the feelings are so strong, even primordial. If you're thinking about sleeping with your neighbor's spouse, or worried that your spouse is sleeping with your neighbor, or fantasizing about giving that neighbor what he or she deserves for sleeping with a neighbor's spouse,

then the associated feelings—lust, jealousy, vengeance—are too raw and powerful to overlook.

But even many of the less obviously animal, more “human” meanderings of mind have feelings pretty obviously associated with them. You reflect on a recent social triumph—maybe a well-received joke you told—and it feels *good*, so you keep reflecting for a while, and maybe you imagine how you could have followed it up with a witty coda and vow to throw in the coda next time. You’re pondering an important deadline you seem likely to miss, and you feel worried—and the worry keeps you fixated on the impending debacle until you come up with a plan of action or convince yourself the deadline’s not so important anyway, after which the worry fades and the thought fades with it.

Even that most cerebral of mind wanderings—wondering—seems to have feelings that accompany it. If I’ve sat down to meditate and I find myself indulging my curiosity about something—pondering some puzzle—and I pay close attention, I see that there’s something pleasant about the pondering, a kind of continuously doled-out carrot that keeps me meandering along the path of the puzzle toward a solution; and if I find that solution, I’m given a culminating burst of satisfaction as a reward. As John Ruskin put it in the nineteenth century, “Curiosity is a gift, a capacity of pleasure in knowing.”

At least, sometimes curiosity feels like that—like a pleasure so refined that you barely notice it. But Samuel Johnson, writing in the eighteenth century, put a different spin on it: “The gratification of curiosity rather frees us from uneasiness than confers pleasure; we are more pained by ignorance than delighted by instruction.”

Sometimes that’s true—sometimes the quest to know something feels more like an urgent drive, an unsettling thirst. If you’re trying to find out whether the stock market, which contains your life savings, continued its recent plunge today, that’s different from wondering why the stock market crashed in 1929. If you’re trying to find out whether your spouse is sleeping with your neighbor, that’s different from

wondering whether your neighbor, and more different from wondering whether you should sleep with neighbors—or, for that matter, wondering what makes stars shine or why the night sky is dark. Curiosity is more like a desire to depend on how directly and how well defined by natural selection; the more subtle and pleasant the

But the main point is that the brain scans are showing that the dopamine system, the system of desire and pleasure, is

So this is what I take away from the brain scans (I mean, many hours of them) that are showing that the dopamine system, the system of desire and pleasure, is active when we are curious. In June 2015, shortly after I was named editor, I rewarded myself with a trip to the Forest Refuge, an appendage of the refuge geared toward experienced meditators. Two weeks was a psychotherapy session with Akincano Marc Weber. Or, as he put it, “Every thought has a propellant.”

The word *propellant* suggests that the mind is wandering, and the propellant is the desire to know. When your mind is wandering, the propellant is the desire to know. When your mind is wandering, the propellant is the desire to know. When your mind is wandering, the propellant is the desire to know.

wondering whether your neighbor's spouse is sleeping with another neighbor, and more different still from wondering what makes spouses sleep with neighbors—or, for that matter, what makes birds sing or what makes stars shine or what makes anything do anything. [Whether curiosity is more like a desperate hunger or a delightful lure seems to depend on how directly and urgently relevant it is to our interests as defined by natural selection; the less direct and urgent the connection, the more subtle and pleasant the feeling.]

But the main point is just that all kinds of curiosity—ranging from a driving, headlong quest to a pleasant stroll along the byways of speculation—do seem to involve feelings. It's no surprise, then, that brain scans are showing that a curious state of mind involves activity in the dopamine system, the system involved in motivation and reward, in desire and pleasure.

So this is what I take away from many hours of failing to meditate (I mean, many hours of failing to meditate and occasionally succeeding at mindfully observing this failure): thoughts that grab my mind and carry it along with them have feelings attached, however subtle those feelings may be. I'm happy to report that this link between feeling and thought has been observed by people whose powers of meditative introspection are way better developed than mine. In June 2015, shortly after sending a rough draft of this book to my editor, I rewarded myself with a two-week meditation retreat at the Forest Refuge, an appendage of the Insight Meditation Society that is geared toward experienced meditators. The guiding teacher for those two weeks was a psychotherapist and former Buddhist monk named Akincano Marc Weber. One night during a dharma talk, he said, "Every thought has a propellant, and that propellant is emotional."

The word *propellant* suggests the answer to an important question: When your mind is wandering, when your default mode network is running the show, how does the network decide which module gets to propel its thought into consciousness at any given time? We've

already heard references to some kind of competition among modules for dominance—references to a “dog-cat-dog world” that lies beyond the bounds of awareness. But what determines which dog wins? What makes one dog more powerful than another?

Feelings as Filing

So far as I can tell, the best candidate for that honor is feelings. Of all the thoughts engaged in subterranean competition at a given moment, maybe the thought that has the strongest level of feeling associated with it is the one that gains entry into consciousness.¹

This is sheer conjecture and could well be wrong, but it would certainly make sense as a way for natural selection to organize the mind. After all, feelings are judgments about how various things relate to an animal’s Darwinian interests. {So, from natural selection’s point of view, feelings would make great labels for thoughts, labels that say things like “high priority,” “medium priority,” “low priority.”} If you’re a day away from some event that will markedly affect your social status—an important presentation, a big party you’re hosting—preparation-related thoughts are high priority, hence high anxiety. But those thoughts are lower priority, and the anxiety less acute, if you’re weeks from the event. If you and your best friend just had a huge argument, figuring out what to do and say about that is a matter of some importance—greater importance than thinking about a casual acquaintance you may have offended; hence the difference between feelings of inner turmoil and feelings of mild concern.

In all of these cases, the feelings associated with the thoughts will be commensurate in strength to the importance of the thoughts as natural selection defines importance. And when the default mode takes over—when your mind isn’t focused on talking to someone or reading a book or playing a sport or some other immersive task—it is the most

“important” thoughts, the ones that get priority.

There will be times, of course, when you’re competing for admission to a particular module. Sometimes life is blessedly free of such competition. In that case, the feeling linked to a thought enters awareness via your default mode network. But if you pay close enough attention while meditating—you’ll pretty much always be on balance positive or negative—then a thought suddenly enters awareness. Because the strength of the feeling, it wouldn’t have gotten in otherwise. So, among other things, you’re aware of the thoughts, and importance (in the sense of the term) determines which thoughts get in.

Again, I don’t want to sound too dogmatic about psychology. In fact, even if we’ve embraced a modular model of the mind, I’ve described, there probably are other ways in which modules carry the data. The most plausible one on offer is that the data from the results of meditative practice isn’t data, it’s a legitimate form of further exploration.

This particular hypothesis is a natural part of the path of meditative progress. It’s a way to view my feelings with some distance. It’s to view thoughts that way. And I don’t think that meditators seem to have an easier time of it. That would make sense if, in fact, the thoughts stick to your consciousness.

"important" thoughts, the ones labeled with the strongest feelings, that **get** priority.

There will be times, of course, when the most important thought competing for admission to consciousness isn't all that important; sometimes life is blessedly free of issues that need urgent attention. In that case, the feeling linked to the thought that enters consciousness via your default mode network may not be very strong. But I suspect that if you pay close enough attention—which is a lot easier if you're meditating—you'll pretty much always sense a feeling tone, one that is on balance positive or negative, associated with a thought that suddenly enters awareness. Because if the thought didn't have some such feeling, it wouldn't have gotten your attention in the first place. Feelings are, among other things, your brain's way of labeling the importance of thoughts, and importance (in natural selection's somewhat crude sense of the term) determines which thoughts enter consciousness.

Again, I don't want to suggest that this is a consensus view within psychology. In fact, even if we confine ourselves to psychologists who have embraced a modular model of the mind somewhat like the one I've described, there probably is no single view on what determines which modules carry the day. But this hypothesis strikes me as the most plausible one on offer. It makes Darwinian sense, and it meshes with the results of meditative introspection. And, though introspection isn't data, it's a legitimate aid in deciding which hypotheses merit further exploration.

This particular hypothesis may help explain something about the path of meditative progress. As I mentioned earlier, I find it easier to view my feelings with some measure of detachment than to view my thoughts that way. And I don't think I'm an aberration [Lots of meditators seem to have an easier time with feelings than with thoughts.] That would make sense if, indeed, feelings are the glue that makes thoughts stick to your consciousness, that makes you unreflectively

take ownership of them. After all, presumably you can't start dissolving that glue—and so can't get any distance from your thoughts—until you learn to see it clearly, learn to view feelings with some objectivity.

Indeed, in this scenario, you'd have to be good at viewing even very *subtle* feelings with objectivity before you could view a wide variety of thoughts that way. So it stands to reason that it's quite advanced meditators, like Joseph Goldstein, who would most clearly and vividly see thoughts fail to stick—see them arise and pass away without ever finding purchase in the mind.

This hypothesis—that feelings are, among other things, the mind's way of assigning priority labels to thoughts—is consistent with a broad trend in psychology over the past several decades: to quit talking about “affective” and “cognitive” processes as if they were in separate compartments of the mind and recognize how finely intertwined they are. And this trend is yet another case where modern psychology was anticipated by ancient Buddhism. In a famous sutra called *The Greater Discourse on the Destruction of Craving*, the Buddha says that a “mind object”—a category that includes thoughts—is just like a taste or a smell: whether a person is “tasting a flavor with the tongue” or “smelling an odor with the nose” or “cognizing a mind object with the mind,” the person “lusts after it if it is pleasing” and “dislikes it if it is unpleasing.”

As we'll see a few chapters from now, the fine entanglement of affect and cognition helps make sense of one of the crazier-sounding Buddhist propositions: that the things we perceive in the world out there—trees, airplanes, pebbles—don't exist, at least not in the sense that we naturally see them as existing. And as we'll see in the next chapter, this entanglement of affect and cognition can also help us wrestle with a conundrum I alluded to earlier: If the self doesn't exist, then what are the real dynamics of what is commonly called “self-control”? And what does Buddhism tell us about how to get some of this “self” control?



In the eighteenth century, Hume wrote that human reason is not meant by “passions” what we wouldn't be worth noting. Feelings like lust or vengeance are the show. But Hume meant feelings, broadly speaking. Reason plays an important role in never really calling the shots. We decide on the basis of a feeling.

Where did Hume get this notion—carefully watching his feelings, being mindful before mind philosophers go, Hume was p