

# Exploring the Roles of Emotions in Self-Control

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## 7.1. Introduction

This chapter aims to make the case that emotions can be conducive to self-control just as much as they can be an impairment to self-control. If so, the capacity for self-control is not best served by learning how to tame one's emotions, but by learning how to recruit the right emotions in the right circumstances.

This view contrasts with currently popular “divided mind” accounts of self-control, which pit reason and emotion in structural opposition to one another, and understand self-control as reason winning in the battle with emotion (e.g., Sripada 2014; Metcalfe & Mischel 1999). On the contrary, I will argue that people deficient in self-control are not necessarily more emotional than self-controlled people (see also Baumeister et al. 2007; Fujita et al. 2016). What self-controlled people have mastered are affective strategies of self-control, namely strategies to recruit and manage their emotions so as to set long-term goals and protect them from short-term threats.

The chapter proceeds as follows. First, I offer a working account of the concepts of self-control and emotion, in preparation for exploring their relation. Second, I provide a taxonomy of the main ways in which emotions can impair self-control. Third, I explain how each of the impairing paths of emotional influence can be traveled in ways that are beneficial to self-control. The final section summarizes what has been achieved.

## 7.2. What Is Self-Control?

I understand self-control as the capacity to set distal and important goals and shield them from more proximal but less important goals that are in conflict with them (Rachlin 2000). Two varieties of self-control can be distinguished: *reactive self-control*, which consists of resisting the temptation to pursue the more

proximal but less important goal, and *proactive self-control*, which consists of preventing the temptation to pursue the more proximal but less important goal from emerging in the first place (Fujita 2011).

As convincingly argued by Fujita (2011) and Fujita et al. (2016), the notion of self-control should include both reactive and proactive varieties, because they both contribute to positive life outcomes, with proactive self-control possibly taking on an even more central role than reactive self-control in people who are high in trait self-control (Galla & Duckworth 2015).

The rationale for expanding the notion of self-control to include proactive varieties also requires that we think of self-control as encompassing both *goal-setting* (determining that a distal goal is to be pursued) and *goal-shielding* (protecting the distal goal from interference) rather than just the latter. People high in trait self-control would *not* have positive life outcomes with respect to health, academic performance, financial security, and so on if they never set distal and important goals, and only managed to avert temptation because they have no distal goals to be interfered with.

Even with these broadening amendments, the notion of *self-control* is narrower than the notion of *self-regulation*, which I understand as the capacity to set and achieve goals writ large, with or without the motivational interference that makes self-control necessary. For example, one needs self-regulation to raise one's left hand, but in ordinary circumstances no self-control.

The *proximity* and the *importance* of goals come in degrees and their role in self-control problems is comparative. The degree to which a goal is distal or proximal depends on the time at which it can be accomplished. For example, going to a rave party this coming Saturday is *more proximal* than getting a passing grade on the Monday test because it can be accomplished earlier in time. The degree to which a goal is important or unimportant depends on its placement on an essential goal hierarchy that can be used as a reference point (Kruglansky & Kopetz 2010).<sup>1</sup> For many students in good standing, getting a passing grade on the Monday test is *more important* than going to a rave party this coming Saturday.

The reason why we speak of self-control as a *capacity* is that in many cases the more proximal but less important goals have *more psychological salience* than the distal and more important goals. The goal of going to a rave party this coming Saturday not only comes earlier, but it also has more attentional drawing power, it can be achieved with less effort, it is more concrete, and it offers more sensory rewards than the goal of getting a passing grade on the Monday test.

<sup>1</sup> A difficult question I won't tackle in this chapter is how the essential goal hierarchy is established, a task that would require exploring the complex interplay of objective and subjective factors in determining the ranking of a person's goals to be used as a reference point in the assessment of self-control.

These appealing features endow the goal of going to the party this coming Saturday with higher psychological magnetism than the goal of getting a passing grade on the Monday test, generating the need for exercising self-control of either the reactive variety (one can actively try not to think about the party when Saturday comes so as to resist the ongoing temptation) or the proactive variety (one can move to a remote cabin in the mountains on Saturday morning so as to make going to the party physically impossible).<sup>2</sup>

### 7.3. Emotions and Regulation

To explore the roles of emotions in self-control demands that we first get clear on what emotions are. This is easier said than done, because the literature on emotions is divided on how to define them (Scarantino 2016). One of the few areas of consensus concerns the list of components that plausible definitions of emotions can select from. Consider an episode of intense fear due to the sudden appearance of a grizzly bear on your path while hiking.

At first blush, we can distinguish in the complex entity that is fear an *evaluative* component (e.g., appraising the bear as dangerous), a *physiological* component (e.g., increased heart rate and blood pressure), a *phenomenological* component (e.g., an unpleasant feeling), an *expressive* component (e.g., upper eyelids raised, jaw dropped open, lips stretched horizontally), and a *behavioral* component (e.g., an impulse to flee).

The million-dollar question is: Which subset of the evaluative, physiological, phenomenological, expressive, and behavioral components is *essential* to emotion? Three main traditions of research—the *feeling tradition*, the *evaluative tradition*, and the *motivational tradition*—have provided three different answers to this question throughout history and are still battling for supremacy (Scarantino 2016). Let us consider them in turn, because they provide us with three entry points for understanding the impact of emotions on self-control.

#### 7.3.1. Emotions as Feelings and Hedonic Regulation

According to the *feeling tradition*, the essential component of an emotion is the phenomenological one: emotions are essentially ways of feeling. This view has

<sup>2</sup> Strategies of self-control can have reactive and proactive facets at the same time. For example, reappraising the goal of going to the party as an expression of one's weakness of character will likely both reduce the attentional drawing power of the rave party, i.e., weaken the temptation, and make going to the party less likely to qualify as a temptation in the first place.

largely dominated the study of emotions from Ancient Greece to the early twentieth century, and it has never stopped being influential, in part because it seems to capture folk intuitions about emotions better than its alternatives. When asked to rank in order of importance five “attributes” of emotion—facial expressions, vocal expressions, feeling states, cognitive changes, and autonomic changes—English speakers reliably pick feelings (Panksepp 2000).<sup>3</sup>

William James formulated what is probably the most influential version of the feeling theory, in part because he did not treat emotional feelings as primitives, but instead tried to understand what they were constituted by. His influential proposal was that the way emotions feel is the way perceptions of bodily changes feel: “*our feeling of [bodily] changes as they occur IS the emotion*” (James 1884, 189, 190).

The idea that emotions are pleasant or unpleasant feelings is very prominent among theorists interested in exploring the roles played by emotions in self-control. Notably, this is true both for theorists who think emotions are detrimental to self-control and for theorists who think emotions can play a positive role with respect to self-control.

Metcalf and Mischel (1999), who have a gloomy view of the emotions’ impact on self-control, understand the “hot system” that generates emotions as “contribut[ing] feeling components to the phenomenology” (6). Carver and Scheier (1998), who suggest instead that emotions can help self-regulation, think of them as *affect*, understood as “a feeling quality, a sense of positiveness or negativeness” (122). Baumeister et al. (2007), who argue that emotions can play both negative and positive roles with respect to self-control, understand emotions as “state[s] of conscious feeling, typically characterized by physiological changes such as arousal” (168–169).

The assumption that emotions are essentially feelings often comes along with a companion assumption about *emotion regulation*, understood as the set of “processes by which we influence which emotions we have, when we have them, and how we experience and express [our] emotions” (Gross 2008, 497). If emotions are essentially feelings of pleasure and pain, a prominent aspect of their regulation will be aimed at maximizing pleasure and minimizing pain. As Tamir (2015, 200) has noted in her helpful analysis of motives in emotion regulation, “the common assumption [in the theory of emotion regulation] is that people regulate their emotions primarily to feel good and avoid feeling bad.” I refer to this form of regulation as *hedonic regulation*, because its purpose is to maximize pleasure over pain, which will generally translate into the attempt to pursue pleasant emotions and to avoid unpleasant emotions.<sup>4</sup>

<sup>3</sup> The solitary exception is constituted by philosophy students, who indicate cognitive changes as being more important attributes than feelings.

<sup>4</sup> Tamir (2015) similarly refers to “hedonic motives” in emotion regulation. She adds that there may be rare cases in which the attempt to maximize pleasure over pain requires one to temporarily pursue “counterhedonic motives” and seek emotions that are in some ways unpleasant, as a masochist may do if he or she happens to derive psychological pleasure from physical pain.

Despite its historical popularity and current dominance among theorists of self-control, the feeling tradition in the study of emotions has been the object of scathing attacks in the course of the 20th century, which have led to the emergence of competing traditions.

### 7.3.2. Emotions as Motivations and Executive Regulation

Feeling-centered accounts of emotions have been charged, among other things, with neglecting the emotions' roles in motivating goal-seeking behaviors. For example, fear is not just an unpleasant feeling: it is also a mechanism that motivates danger-avoidant behaviors. This is the idea at the heart of the *motivational tradition* in the study of emotions, which got started with Aristotle's account of emotions as involving behavioral impulses, found increasing support during the Middle Ages (King 2010) and became canonical with Dewey (Scarantino 2016). For Dewey, an emotion "in its entirety" is "a mode of behavior which is purposive" and "which also reflects itself into feeling" (1895, 15), with the feeling component playing a supportive role with respect to the "readiness to act" component (1895, 16–17).

The behaviorists also famously criticized the feeling theory in the early 20th century because it focused on inner states, which are not externally observable, rather than behaviors, which are externally observable. But the behaviorists missed out on what is special about emotions as modes of behaviors, because they tended to describe such behaviors as reflex-like (Watson 1919). When afraid of a suddenly looming object, we do move away from it in a reflex-like fashion. However, this is the exception rather than the rule. The rule is that emotions are associated with action tendencies that allow for a great deal of executive control. When afraid of a dog running toward me, I activate an avoidance tendency that can be manifested in a variety of different ways (or not at all), depending on the circumstances.

On the *Motivational Theory of Emotions* I have proposed, emotions are behavioral programs which provide solutions to evolutionary or cultural problems in the form of action tendencies with control precedence (Scarantino 2014; Frjida 1986; Ekman 1999; Dewey 1894). This account shifts the primary focus of analysis from how emotions *feel* to what emotions *do* for the agent. Roughly, an action tendency is *emotional* when it has *control precedence*, and it has control precedence when it "clamor[s] for attention and execution" (Frijda 1986, 78).

We can distinguish two features of this "clamoring." The first is *prioritization*, namely the idea that an emotional action tendency interrupts other ongoing activities and limits access to non-goal-related information. When afraid of a

grizzly bear on our path, we interrupt everything else we are doing and immediately and wholly focus on the goal of avoiding the bear. As a result, our ability to process information which is not directly goal-related is reduced. On occasion, this will result in the shortsightedness of our emotional actions (e.g., in a panic, we may forget that one should never start running away from a bear).

A second feature of control precedence is *preparation*, namely the fact that emotional action tendencies are accompanied by generalized bodily arousal/excitation/invigoration toward goal achievement. For example, our avoidance tendency in the presence of the bear may involve increases in heart rate and blood pressure, emergence of a potentiated startle reflex, pupil dilation and other physiological markers which collectively prepare our body for avoidant action prior to engaging in it.

Now, the fact that emotional action tendencies are set for execution but not yet executed makes regulation possible, giving agents the ability to flexibly adapt their actual responses to the circumstances (Frijda 1986). Deciding whether and how to pursue the goal of an emotional action tendency is not engaging in hedonic regulation, because the regulator's primary aim is not to maximize pleasure and minimize pain. Rather, the aim of what I call *executive regulation* is to determine if the emotion's goal is to be pursued, and, if so, how best it can be pursued.<sup>5</sup> For example, fear feels unpleasant, but it is often a good means to the end of avoiding a particular danger. So the executive regulation of fear may be geared toward optimally achieving the end of escaping the danger at hand, rather than toward minimizing the pain that fear involves, although escaping the bear also ends up eliminating the pain.

### 7.3.3. Emotions as Evaluations and Fittingness Regulation

A second feature that feeling-centered theories of emotions have been accused of neglecting is that emotions have intentionality, or the capacity to represent. First, emotions appear to be about *particular objects*, at least most of the time. We are

<sup>5</sup> The distinction between hedonic regulation and other types of regulation is inspired by Tamir (2015), who distinguishes between "hedonic motives" and "instrumental motives" in regulation, with the former having to do with the maximization of the ratio between pleasure and pain and the latter having to do with "potential benefits of emotions other than their immediate phenomenology" (6). The motives underlying what I call *executive regulation* and *fittingness regulation* (see following discussion) are instrumental in Tamir's sense, but her category of instrumental motives is much too broad for my purposes, as it includes varieties of what she calls "performance motives," "epistemic motives," "social motives," and "eudaimonic motives" that have nothing to do with the types of regulation I am focusing on. Another difference is that my distinction between hedonic, executive, and fittingness regulation, unlike Tamir's (2015) taxonomy, is not meant to exhaust the varieties of motives that can ground emotional regulation.

commonly afraid, angry, or sad about particular individuals, events, or states of affairs, rather than in an objectless fashion. Second, emotions appear to be about *formal objects* (Kenny 1963) or *core relational themes* (Lazarus 1991). Subtleties apart, fears seems to be about dangers, anger about slights, sadness about losses, shame about failures to live up to one's ideals, and so on.

As a result, emotions can be mistaken, if produced when their proprietary formal objects/core relational themes are not instantiated. For example, it is arguably mistaken to be afraid of a harmless doll, angry at someone who was kind to us, or sad about a life-affirming success. Note that in each of these cases the inappropriateness at hand is *internal* to the emotion itself rather than *moral* or *prudential* in nature: being afraid does not "fit" things that are not dangerous, being angry does not "fit" things that are not slights, and being sad does not "fit" things that are not losses (D'Arms, forthcoming). Particular and formal objects constitute two aspects of an emotion's intentionality: emotions are *object-directed* insofar as they have particular objects, and they are *fitting* insofar as their particular objects instantiate the formal objects represented by the emotion. It is a different question to determine whether emotions like fear, anger or sadness meet moral standards (e.g., moral appropriateness: is my anger at income inequality morally appropriate?) or promote my interests (e.g., prudential appropriateness: is my anger at my boss advantageous to me?).

The inability of the feeling theory to capture the intentionality of emotions was one of the propulsive forces behind the rise of the *evaluative tradition* (a.k.a. cognitivist tradition) in the 1960s. In philosophy, evaluative theories initially tended to identify emotions as judgments, portraying fear as the judgment that something is dangerous or anger as the judgment that a slight has been committed. It progressively became clear that judgments are poor candidates for capturing the sense in which emotions have intentionality. Among other defects, judgments overintellectualize the emotions, and they neglect their motivational dimensions (Scarantino 2010).

In more recent times, teleosemantic theories have emerged as promising options for making sense of the intentionality of emotions. The core insight of teleosemantics is that a system represents what it has the function of carrying information about (Dretske 1988). Applied to emotions, the idea is that fear represents danger because it has the function of being correlated with danger, anger represents slights because it has the function of being correlated with slights, etc.

A teleosemantic approach leaves open what the bearer of the representation is, allowing teleosemantics to be combined with a variety of competing research traditions. Prinz's (2004) *perceptualist account*, which merges themes from the feeling tradition and the evaluative tradition, holds for instance that emotions are *bodily perceptions* designed to be elicited by certain core relational themes.

With inspiration from the motivational tradition, I have argued instead that emotions are *behavioral programs* designed to be elicited by certain core relational themes (Scarantino 2014).

These alternative approaches roughly agree on what is being represented (core relational themes) and on how the representing is grounded (through functions), but they disagree on what does the representing (e.g., perceptions vs. behavioral programs). Other accounts of the intentionality of emotions have been proposed, but their discussion lies outside the scope of this chapter (see Scarantino and De Sousa 2018).

If emotions are *inter alia* emotion-specific representations of what the world is like, another form of emotion regulation becomes possible. Borrowing the terminology proposed by D'Arms (2005, 2013), I call it *fittingness regulation*, because it aims to regulate emotions so as to make their evaluations internally appropriate to the particular objects emotions are about.<sup>6</sup> For example, the fittingness regulation of fear may have as its purpose making sure that I only get afraid when genuinely in danger. The primary focus here is neither on how fear feels nor on how fear motivates action, but rather on avoiding episodes in which danger is being represented—by fear—without danger being actually present.

The three forms of regulation I have distinguished—*hedonic*, *executive*, and *fittingness regulation*—do not operate independently of one another: an agent may at the same time regulate his or her emotions so as to maximize pleasure and minimize pain, so as to determine if the emotion's goal is to be pursued and how, and so as to ensure that the emotion's representation matches what the world is like. At the same time, it is helpful to distinguish the different aims the regulation of emotions may have, as a preliminary step toward exploring how emotion regulation and self-control are related. This is the topic to which I now turn.

#### 7.4. Are Emotions Good or Bad for Self-Control?

I will assume from here on that emotions are behavioral programs paradigmatically manifested by action tendencies with control precedence, that emotions typically involve pleasant and unpleasant feelings and that emotions have representational contents captured by their core relational themes. Much more could

<sup>6</sup> Tamir (2015) describes “epistemic motives” as a subset of “instrumental motives,” but her epistemic motives go beyond the motive to seek “fittingness,” and may in fact conflict with it. On Tamir's (2015) view, when “guided by *epistemic motives* people may be motivated to experience emotions to attain desirable information” (7). This fails to distinguish between information that is true and desirable and information that is false and desirable. The fittingness regulation of emotions aims at ensuring only that the emotions are appropriate with respect to their circumstances of elicitation: the *accuracy* rather than the *desirability* of the information is all that matters.

be said to defend and articulate this account of emotions, but this bare-bones outline will have to do for my purposes.

The question before us is: How do emotions impact self-control? I distinguish three primary paths through which emotions can have an influence on self-control (but I am open to there being other forms of influence):

- *Goal-centered path*: the way emotions lead to the prioritized pursuit of some goals over others may affect one's capacity to set distal and more important goals and protect them from proximal and less important goals;
- *Valence-centered path*: the way emotions feel may affect one's capacity to set distal and more important goals and protect them from proximal and less important goals;
- *Evaluation-centered path*: the way emotions evaluate the world and the self within it may affect one's capacity to set distal and more important goals and protect them from proximal and less important goals.

So far, self-control researchers have been especially keen on unveiling the negative influences emotions can have on self-control along these three paths. My core thesis is that each of these three paths can equally well be conducive to the promotion of self-control. Let us first consider how emotions can be a threat to self-control, and then explore how they can become a benefit to self-control along each path.

## 7.5. Emotions as a Threat to Self-Control

### 7.5.1. Emotions and Tempting Proximal Goals

The conflict between distal and proximal goals that self-control aims to resolve in favor of distal goals is often described in terms of a conflict between two systems into which the mind is divided: a deliberative (or cool or cognitive) system and an emotional (or hot or affective) system. This is true for a number of self-control models in philosophy and in the sciences of mind, especially those who focus on modeling *reactive self-control*, often referred to with the label of *willpower*.

For example, philosopher Chandra Sripada (2014, 50) has recently argued that we should distinguish between two compartments of the human mind, the “deliberative motivational system” which leads to desires through practical reasoning and the “emotional motivational system” which leads to desires through emotions. On Sripada's view, emotions are characterized by (a) *passivity* with respect to their triggering mechanism, in the sense that when suitable stimuli are presented, emotions occur automatically and mandatorily, and (b) *recalcitrance*

to reason, in the sense that the desires associated with emotions continue to “exert their motivational force” even when practical reasoning determines the emotion to be unfitting and the actions it motivates to be unwarranted.

This combination of passivity and recalcitrance shows for Sripada (2014) that the deliberative and emotional systems are “relatively independent of each other” (51) and can generate conflicting motivations. The resolution of the conflict in favor of the desires associated with the deliberative system is what willpower is about. In other words, Sripada takes “the exercise of willpower [to be] a proprietary action available to the deliberative motivational system that functions to prevent an emotional desire from winning out in controlling action” (57). On this picture, emotions cannot be a source of willpower, and the desires they generate are precisely what willpower aims to attenuate or block.

A similar picture of the human mind is outlined by psychologists Janet Metcalfe and Walter Mischel (1999), who have posited the existence of a “cool cognitive system” and a “hot emotional system” endowed with different properties. The “cool cognitive system” is specialized for “complex spatiotemporal and episodic representation and thought,” and the “hot emotional system” is specialized for “quick emotional processing and responding on the basis of unconditional or conditional trigger features” (4). The cold cognitive system is “slow,” “complex,” and “goal sensitive,” and it is where self-control originates, whereas the hot system is “fast,” “simple,” “reactive,” and largely under “stimulus control” (4). On this view, exercising willpower amounts to taming “the dominance of the hot system in the service of cool goal pursuit,” thereby “overcom[ing] the power of stimulus control” associated with emotions (3).

These two models, and many others of the same ilk, conceptualize the relation between emotions and self-control roughly in terms of the following:

*Self-control impairing goal-centered path:* agents set distal and important goals through the deliberative/cold cognitive systems, and emotions set and make salient proximal and less important goals that interfere with the pursuit of distal goals.

For example, the deliberative system may set the distal goal of creating a great working relationship with one’s boss, but when invited for dinner and approached by the boss’s big dog while on the couch one may experience fear, becoming motivated to pursue a proximal goal—fleeing the room—which threatens the distal goal (Sripada 2014). What is called for in this case is *executive regulation* of fear of the *inhibiting* variety, namely regulation aimed at suppressing the avoidance tendency with control precedence associated with fear.

I do not deny that emotions can generate this sort of threat to self-control. We can think of many cases in which emotions interfere with our distal goals

by setting and making salient proximal goals that are incompatible with them, from lusting after a coworker (which threatens our distal goal of being faithful), to experiencing gluttonous desire at the sight of cake (which threatens our distal goal of dieting), to getting mad at one's employees (which threatens our distal goal of nurturing a friendly work environment), and so on. In all these cases, self-control is indeed achieved through the inhibition of one's emotions.

### 7.5.2. Emotions and "Mood Repair"

Furthermore, there are other mechanisms by which emotions can be a threat to self-control. Consider the following:

*Self-control impairing valence-centered path:* agents set distal and important goals through the deliberative/cold cognitive systems and (negative) emotions, by virtue of how they feel, create a need for "unpleasant feeling repair" which interferes with the pursuit of distal goals.

This path has been extensively studied by Baumeister et al. (2007), who have examined the adverse impact of emotional distress—a catch-all category that applies to all kinds of negative emotions—on self-control. The starting point of this research program is the well-established correlation between emotional distress and a variety of self-control failures, concerning for instance binge eating or drinking (Haedt-Matt & Keel 2011, Witkiewitz & Villarreal 2009; Heatherton et al. 1998), gambling (Raviv 1993), internet binge surfing (LaRose et al. 2003), and cigarette cravings (Willner & Jones 1996).

What explains these correlations? A commonly proposed explanation is that these are all cases in which the pursuit of the proximal goal rather than the distal one is a means to the end of feeling better. In other words, it is suggested that *pain-reducing hedonic regulation* of emotions is causally responsible for the various detected failures of self-control. For example, suppose Tom has the distal goal of dieting, and further suppose that a phone call with a cantankerous and distant lover puts him in a terrible mood. The suggestion is that, by pursuing the proximal goal of eating cake, Tom can immediately start feeling better, although doing so involves interfering with the dieting goal.

This valence-centered path of influence strikes me as plausible, even though I have reservations about the "mood-freezing" paradigm commonly used to study it (Manucia et al. 1984). In mood-freezing experiments, subjects are given a placebo pill and told that it will preserve their emotions' hedonic status for some time—negative for emotions such as sadness and anger, positive for

emotions such as happiness and awe—no matter what they do. This appears to produce changes in behavior.

The main evidence for such changes concerns sadness. Whereas sad people tend to manifest helping behaviors, such behaviors are allegedly thwarted by mood-freezing pills. Baumeister et al. (2007) infer that “[i]t is not . . . sadness [that] automatically or directly triggers a behavioral response of helping.” Rather, “people resort to helping as a stratagem to make them feel better,” from which they conclude that “emotion is the result, not the cause, of behavior” (178).

This proposed conclusion reveals a misunderstanding on the nature of causation (Scarantino 2017).<sup>7</sup> In order for an emotion to be the cause of behavior, the emotion need not operate alone. It can be a member of a set of causal factors that jointly bring about behavior, just like the striking of a match can be the cause of a fire by being a member of a set of causal factors—including oxygen, flammable materials, etc.—that jointly bring about the fire (Mackie 1974).

The fact that emotion and regulation are both necessary for behavior to be produced is not a threat to the claim that emotion and regulation are both causal factors for behavior. If so, each can be selected for pragmatic reasons as “the” cause of the behavior, just as we can select the striking of the match (in ordinary circumstances) as “the” cause of the fire or the presence of oxygen as “the” cause of the fire (when the fire occurs in a supposedly oxygen-free NASA testing lab). The point is that mood-freezing experiments do not show that emotion is the *result* rather than the *cause* of behavior, but at best that emotion does not cause behavior in a reflex-like fashion but rather in cooperation with regulation.

In addition, the idea that emotion regulation is primarily hedonic, which is what mood-freezing experiments are taken to show, is hard to reconcile with the fact that emotions are, among other things, motivational mechanisms geared toward the pursuit of proprietary goals which are non-hedonic in nature. As mentioned earlier, fear is not just an unpleasant feeling, but also a motivational mechanism for danger avoidance.

Now suppose that experimental subjects are told that their hedonic state will not change due to a mood-freezing pill and further suppose that they are then presented with a dangerous bear. What the mood-freezing paradigm predicts is that they would not act in such circumstances, because nothing that they do can repair their “moods.” This is implausible. Even if they think that their pain won’t

<sup>7</sup> An additional problem is that telling someone that their mood will not change no matter what they do is likely to change how they feel, intensifying current emotions (e.g., making them sadder), eliciting new emotions (e.g., making them both angry and sad), and so on. This potential confounding factor is generally not controlled for in mood-freezing experiments, and it makes comparisons between experimental and control subjects problematic. Subjects who were administered the pill may differ from those who weren’t not just in terms of their beliefs about the ability of their hedonic states to change, but also in terms of their overall emotional states, which would lead to an “apples and pears” type of comparison.

subside no matter what, subjects are likely to engage in *executive regulation* of their fear, looking for the most efficient ways to escape the bear. This is because we don't act out of fear primarily to get rid of fear, but rather to get rid of dangers, even if getting rid of dangers results in the elimination of the pain of fear as a by-product (in normal circumstances).

This being said, hedonic regulation can and should be part of the explanation for why emotional distress often leads to self-control failure. Our primary focus in studying this path of influence should be on varieties of distress involved in negative emotions occurring in the wild which fail to motivate towards the pursuit of specific instrumental goals.

Examples include objectless varieties of emotional distress (e.g., anxiety about nothing in particular) and varieties of emotional distress with objects that are in the past or in the future (e.g., distress involved in grieving a dead spouse, or distress involved in anxiety about a job interview one month later). In such cases and others like them, there really is no option of "repairing" one's negative mood by means of the pursuit of an instrumental goal. Note that here it is the nature of the emotion's objects that "freezes" the mood, rather than a pill. In such circumstances, the removal of pain through overeating, gambling, and so on may well shift from being a by-product of instrumental goal pursuit to being the primary goal being pursued.

### 7.5.3. Emotions and the Escape from the Self

The correlation between emotional distress and self-control failures has also been explained through an additional mechanism, namely the desire to escape self-awareness (Baumeister et al. 2007). The proposal here is that negative emotions can lead to a negative evaluation of the self, which in turn can lead to behaviors pursuant of proximal goals in conflict with distal goals but instrumental for removing negative self-awareness.

Suppose that a person feels ashamed for having been unemployed for a few months despite her best efforts to find a job. On the one hand, shame feels unpleasant, so this may lead to a *prima facie* need for mood repair in the form of, say, eating a cookie in violation of one's dieting goal. On the other hand, shame points the subject's attention to an evaluation of the self as having failed to live up to an ego ideal, because this is what shame represents.

Simply eating a cookie won't erase such evaluation of the self, and may in fact amplify it. As a result, the subject may choose activities that reduce self-awareness. Examples may include binge drinking and binge internet surfing. These are activities that interfere with all kinds of distal goals, but are effective in taking the subject's attention away from the self. The mechanism involved here goes something like this:

*Self-control impairing evaluation-centered path:* agents set distal and important goals through the deliberative/cold cognitive systems, and (negative) emotions deliver a self-evaluation that interferes with distal goals because it leads to pursuing proximal goals that reduce self-awareness.

There may be various ways in which self-awareness is reduced. Baumeister et al. (2007, 413) have proposed, for instance, that escaping from the self can be achieved through “cognitive deconstruction,” namely through shifting awareness “toward more concrete and hence less meaningful aspects of the self.” An episode of binge internet surfing may afford this sort of deconstruction, because the agent gets immersed in the concrete demands of website navigation, losing track of the self. On the other hand, an episode of binge drinking generates a more global state of numbness which removes focus on the self not because the focus shifts to something else, but because the focus is no longer on anything in particular.

The goal-centered path, the valence-centered path, and the evaluation-centered path can combine in ways that are detrimental to self-control. For example, an episode of guilt for having survived a Nazi concentration camp can interfere with self-control by providing an (unachievable) proximal goal such as making amends to those who perished, an overwhelmingly unpleasant feeling, and a highly negative self-evaluation, which in combination may lead the agent to binge drinking in violation of one’s distal goal of staying sober. This act replaces the unachievable proximal goal of making amends to the dead with the achievable proximal goal of getting drunk so as to temporarily remove both the pain of guilt and the negative self-evaluation that comes with it, with calamitous effects on one’s ability to be on the wagon.

## 7.6. Emotions as a Means of Self-Control

The punchline of this chapter is that each of the three paths along which emotions can interfere with self-control can also be traveled to promote self-control. Let us consider some of the ways in which this might happen.

### 7.6.1. Emotions and the Setting/Shielding of Distal Goals

The first virtuous path of influence I will discuss is the following:

*Self-control promoting goal-centered path:* emotions set distal and important goals and/or shield such distal goals from proximal and less important goals that interfere with them.

“Divided mind” accounts of self-control tend to assume that the goals toward which emotions predispose us are of the proximal variety, in part because emotions are assumed to be largely under stimulus control. But this is not necessarily the case. Consider love for one’s spouse. Although there are various suggestions about what love’s distal goal may be (Helm 2017), it is clear that loving one’s spouse leads to the pursuit of a number of other distal goals that all share the objective of improving or at least not thwarting the spouse’s well-being. One of such goals is that of staying faithful to one’s spouse, at least in garden-variety forms of romantic love.

If so, romantic love can be a mechanism for setting a distal goal such as the one of being faithful to one’s spouse. In addition, romantic love involves goal-shielding provisions with respect to the goal of being faithful. In the best-case scenario, the agent who is in love will not even notice the extra-marital opportunities—this is at least what people who are in love often report. And even when they do notice them, love will tend to preempt access to information that is not conducive to the distal goal of being faithful (e.g., one will notice fewer tempting details, imagine fewer erotic possibilities, etc.). The loving agent’s attention is directed toward the well-being of one’s partner and the comforting rewards of a long-term union.

This shows that an emotion such as love can be a means of self-control, because it involves *setting* distal goals and *shielding* them from the interference of short-term temptations. The central implication here is that agents do not just rely on practical reasoning to manifest reactive and proactive forms of self-control: they can also rely on their emotions as a means to that end.

The stark dichotomy between “cold/deliberative” and “hot/emotional” systems we get from “divided mind” accounts must be revised, because emotions appear capable of manifesting the very properties taken to be distinctive of cold/deliberative systems.

*Pace Metcalfe and Mischel (1999)*, emotions can be “slow,” “complex,” “goal sensitive,” and helpful for “self-control.” Furthermore, they can “prevent [another] emotional desire from winning out in controlling action” (Sripada 2014, 57), effectively doing the job Sripada reserves exclusively for practical reasoning. For example, when dealing with lust-powered desires that threaten one’s ability to stay faithful to one’s spouse, love can function to prevent them from winning out in controlling action. But love and lust are both emotions, which suggests that emotions can function in a distal goal-shielding capacity just as well as they can in a proximal goal-pursuing capacity.

Love is not a solitary exception: there are many other emotions that can work toward blocking “wayward desires.” Suppose a friend helps you move, with the expectation that you will reciprocate sometime in the future. However, after you

have arranged to return the favor and help him move a few months later, you find yourself indulging in front of the TV watching football, even though you realize the time you were supposed to show up at your friend's house has gone by. Experiencing a burst of gratitude at the thought of your friend's past help can be the very thing that shifts the balance of strength between the long-term desire to reciprocate and the short-term desire to enjoy the football game, finally getting you to leave the couch and help your friend move (see also DeSteno 2009).<sup>8</sup>

These examples can be multiplied, but their point should by now be clear. The way emotions lead to the prioritized pursuit of some goals over others can be recruited *both* to set and protect distal goals from temptations and to undermine distal goals by bringing temptations about. In short, the goal-centered path can be used both to interfere with self-control and to promote it.

### 7.6.2. Emotions and Progress Reports toward Goal Achievement

The second path of positive influence I want to discuss goes something like this:

*Self-control promoting valence-centered path:* emotions by virtue of how they feel provide feedback useful for setting distal and more important goals and protect them from proximal and less important goals.

This path has been extensively studied by Carver and Scheier (1998) in the context of self-regulation, which is not the same as self-control because it does not necessarily involve motivational conflict. But the model can be adapted to the case of self-control. Carver and Scheier's (1998) central thesis is that all forms of goal-pursuit are guided by a pair of feedback loops: an "action loop" and an "affect loop."

The action loop is designed to compare the goal state of the system with the current state and to generate action modifications tasked with bringing about the desired goal. The affect loop is designed to compare the rate of progress toward

<sup>8</sup> A roundabout way in which emotions can promote the pursuit of distal goals is by preventing the achievement of proximal goals that compete with them. Here is an example inspired by Al Mele (2012, 15–16). Suppose an agent has the distal goal of leading an honest life but begins pursuing the competing proximal goal of robbing a house to get some quick money. Being weak-willed, the agent is about to succumb to the temptation, when fear of being caught kicks in, disrupting the plan of robbing the house. In this case, fear helps the agent exercise self-control by generating a distinct proximal goal (avoiding being caught) that effectively preempts another proximal goal (robbing a house) which was on the path to interfering with the distal goal (leading an honest life).

the goal with the current rate and to generate action modifications tasked with bringing about the desired rate of progress.<sup>9</sup>

Suppose that you have decided that, all things considered, you should paint a shed by Sunday night. If the affect loop registers that your rate of progress toward such goal is less than the target rate, you will have an affective experience with negative valence, and intensify efforts to increase the rate. If the affect loop registers that your rate is higher than the target rate, you will have an affective experience with positive valence, and reduce efforts to decrease the rate (this is what they call “coasting”). And if the rate is equal to the target rate, no affect will be generated.<sup>10</sup>

Further suppose that it is Sunday morning and that, despite your previously stated plan to get done by Sunday night, you have not even started, indulging instead in continuous TV watching over the weekend.<sup>11</sup> In such case, there is a proximal goal like binge TV watching that is competing with the distal goal of painting the shed and is winning the contest. But now the affect loop kicks in, signaling by means of a painful feeling that the rate of progress toward the goal of painting the shed has fallen below the desired rate. As a result, your self-regulation turns into self-control, as you deal with the negative feedback you received by finally getting started on the painting project.

I agree that negative and positive feelings can work as “error signals” on the way to goal-pursuit in situations of motivational conflict. Thus, I count this as another important path of positive influence that emotions *qua* feelings can have on self-control. This shows how the valence-centered path can be used to make emotions work for self-control rather than against it, just like the goal-centered path we examined in the previous section.

<sup>9</sup> Carver and Scheier also discuss Simon’s (1967) model of emotions as interrupt systems to outline a second way in which emotions can be elicited (their primary model takes them to be elicited as error signals). Simon argued that emotions are means to the end of responding to “urgent needs,” because they interrupt ongoing processes and reorder the goal hierarchy so as to allow the focusing of resources on newly prioritized goals. Carver and Scheier take the interrupt model of elicitation and the error signaling model of elicitation to be ultimately compatible. On their view, emotions understood as interrupt systems are means to shift from non-focal to focal goals, whereas emotions understood as error signals are means to increase or decrease effort toward focal goals. In both cases, emotions qualify as mechanisms of prioritization of efforts toward goals that either were not on the agent’s radar (with emotions putting them on the radar) or that were not being pursued at the desired rate (with emotions signaling this discrepancy).

<sup>10</sup> Carver and Scheier (1998) distinguish between discrepancy-reducing feedback loops, when the goal is approaching an incentive, and discrepancy-enlarging loops, when the goal is avoiding a threat. Different emotions will be generated by these two kinds of affect loops. Detecting a rate higher than expected in approaching an incentive will lead to eagerness, excitement, and elation, whereas detecting a rate lower than expected in approaching an incentive will lead to frustration, anger, and sadness. Conversely, detecting a rate higher than expected in avoiding a threat will lead to relief and contentment, whereas detecting a rate lower than expected in avoiding a threat will lead to fear, guilt, and anxiety.

<sup>11</sup> This shed painting vs. TV watching example is inspired by Mele (1987, 69).

As a negative feeling can lead to the need for mood repair through the pursuit of a proximal goal (e.g., eating cookies) at the expense of a more important distal goal (e.g., dieting), a negative feeling can also prompt renewed efforts toward the pursuit of a distal goal (e.g., painting a shed) at the expense of a less important proximal goal (e.g., watching TV).

This is an important legacy of the model proposed by Carver and Scheier (1998), but some of their working assumptions strike me as problematic and unnecessary. The model presupposes that positive and negative feelings only register discrepancies in rate of progress, but there is no good reason for such restriction. For example, positive feelings may emerge because one is progressing at exactly the intended rate.

If I am trying to solo climb El Capitan in Yosemite Park, and I have in mind a specific rate of progress, it is plausible that if I hit exactly the intended rate of progress I may feel happier than if I dramatically exceed it, which I had previously calculated would lead me to tire too fast and put my life in danger on the last leg of the climb. The problem is that Carver and Scheier's (1998) model makes no room for positive feelings generated by hitting the rate of progress right on the head.

In addition, it seems unreasonable to assume that the reaction to experiencing a positive feeling that signals a *higher than expected* rate of progress toward the achievement of a goal will necessarily lead to "coasting," i.e., reducing effort, until the positive feeling has dissipated entirely. The intended rate of progress is sometimes just a rough preliminary estimate that we will revise upon detecting our actual rate of progress, from which it follows that by detecting a higher rate of progress than intended I may not "coast" at all but rather update my desired rate of progress upward, considering my former estimate off base.

Most importantly, the underlying assumption that every form of goal pursuit involves synchronous resource trade-offs among goals, which would make "coasting" a prudent energy-saving strategy, seems false. In many cases, my pursuit of a goal does not compete with the pursuit of other goals of mine, or at any rate it does not compete with them so fiercely that I will try to save a maximum amount of resources by reducing effort until the last drop of positive feeling has disappeared.

And even when there is fierce competition, such competition may be resolved by deciding that one goal has to be completed before the other, removing the option of synchronous pursuit. Consider the goal of painting the shed, which competes with the goal of watching TV. When I finally get started on the project and realize that I am progressing at a higher rate than expected, my positive feeling is unlikely to lead me to slow down, because slowing down may save resources for unspecified further goals, but it also interferes with a specific goal that is salient in my mind, namely that of watching some more TV after I am done with the shed. The positive feeling of getting done faster than expected is more likely to lead me to continue at the current rate of progress and possibly

even increase it, so as to be sure that I manage to both paint the shed by Sunday night and watch some more TV before the day is over.<sup>12</sup>

Finally, it is implausible that positive and negative feelings would not be elicited by, respectively, achieving the goal or failing to achieve it, but only by the rate of progress toward the goal. On the picture Carver and Scheier (1998) have in mind, I experience positive and negative feelings when I am working toward completing the shed painting job (depending on my rate of progress), but I experience no positive feelings when I actually get the job done and no negative feelings when I realize painting the shed is beyond my abilities. This not only flies in the face of our experience as agents, but it also hides from view a third important path of influence of emotions on self-control.

### 7.6.3. Immediate Emotions, Expected Emotions, and Gut Feelings

Another way in which emotions can be conducive to self-control through the feedback they provide has to do with the fact that we can anticipate such feedback prior to having experienced it. I have so far only considered the way in which *immediate emotions*, namely emotions that are actually occurring, affect our ability to set distal goals and shield them from temptation. This misses out on *expected emotions*, which are in effect predictions about how we will feel in the future (the immediate-expected distinction is drawn in Loewenstein and Lerner 2003).

Expected emotions can provide valuable feedback—predicted rather than experienced—for progressing toward distal goals. For example, it may well be because I anticipate that I will feel the pleasure of pride upon having painted the shed and the pain of guilt if I fail to do so that I manage to resist the temptation of watching TV all Sunday long (see also Katzir et al. 2010). In other words, the benefits that positive and negative feelings can have on self-control may come from their being anticipated as positive and negative effects of, respectively, goal achievement and goal failure, rather than as signals of *rate of progress* toward goal achievement.

Arguably, there are negative emotions whose beneficial impact on our ability to set distal goals and shield them from temptations comes largely from what we do to avoid experiencing them. Guilt is a case in point. A number of self-control achievements appear due to anticipating the feeling of guilt associated with failures of self-control, without guilt being actually experienced because self-control is exercised in order to avoid feeling guilty (Ent & Baumeister 2016).

<sup>12</sup> Carver and Scheier, who are refreshingly honest about the counterintuitive implications of their “coasting” hypothesis, present some experimental data in support of it (e.g., Fulford et al. 2010), but I do not find any of the experiments discussed to provide compelling evidence for “coasting” as a psychological phenomenon.

Furthermore, feedback can work *retrospectively* rather than *prospectively*, as Baumeister et al. (2007) have emphasized. Once I cheat on my spouse and experience the pain of guilt, I can engage in a learning process that will lead me not to cheat in the future by affecting how I go about making decisions in situations of motivational conflict pertaining to faithfulness. For example, I could form, as a result of the painful experience of guilt, a new if-then rule such as “if invited by an attractive woman to have a drink, say no.”

These so-called implementation-intentions (Gollwitzer 1999) reduce the need for the sort of effortful deliberation that is often disrupted in the face of temptation, and represent a way in which reflecting on how we have felt in the past can affect our ability to exercise self-control in the future.

I should add that “gut feelings” can work as a functionally equivalent analogs of implementation intentions. For example, when presented with a sexual temptation an agent might experience a negative gut feeling in the form of a pang of guilt. In this case, guilt is not only anticipated, but also experienced, although most likely in milder forms than if the cheating option had indeed been pursued. This affective link, just like the cognitive link embodied by the if-then rule, can be activated automatically, also reducing the need for the effortful deliberation that is often disrupted in the face of temptation.

As it turns out, the formation of if-then rules may itself be a strategy for the development of gut feelings. Schweiger-Gallo et al. (2009, 28) reported that people can learn how to regulate their emotions by forming special types of implementation intentions of the form “if situation X arises, then I will/will not manifest emotional response R.” So a judicious use of implementation intentions with emotional consequents may serve to maximize the degree of success implementation-intentions have demonstrated in helping agents to become more self-controlled by turning cognitive links into affective links.<sup>13</sup>

#### 7.6.4. Emotions and Enlightening Self-Realizations

Another way in which emotions can be conducive to self-control is the following:

*Self-control promoting evaluation-centered path:* emotions can deliver a self-evaluation that is conducive to setting distal and more important goals and protecting them from proximal and less important goals.

<sup>13</sup> Baumeister et al. (2007) add that emotions may help self-regulation through two additional mechanisms: they may have a positive impact on decision-making “by encouraging people to attend to relevant information” and they may replenish ego resources (in the case of positive emotions). I don’t have the space to discuss these proposals in what follows.

We have considered earlier the possibility that some emotions like shame may bring to the agent's attention negative self-evaluations. One effect of such negative self-evaluations may be that the agent looks for ways to escape self-awareness, turning shame into a threat to self-control. There is another possibility, namely that the subject reacts to the negative self-evaluation by trying to change the self.

Suppose that you look at yourself in the mirror while naked, and feel ashamed at how overweight you have become. Further suppose that your *fittingness regulation* immediately kicks in, to assess whether this episode of shame is appropriate. If you determine that it is, this may be an effective mechanism for setting, perhaps for the first time in your life, a dieting goal and shielding it from temptations.

By your lights, the emotion has represented the world as it is—you have failed to live up to an ego ideal by letting yourself go. But now you do not react to this realization by trying to escape the negative self-assessment conveyed by your shame. On the contrary, you embrace it, and try to change yourself so as to make the currently fitting shame-driven self-evaluation no longer fitting. This shows that the evaluation-centered path, just like the valence-centered and goal-centered paths, can be used to make emotions work for self-control rather than against it.

The relative independence of emotions from reason/cognition as a representational system is commonly invoked to defend the view that reason ought to be in charge and that the failure of emotions to line up with reason/cognition should lead us to change our emotions. This explains the prominence afforded in the emotions literature to the phenomenon of emotional recalcitrance, which occurs when we irrationally fail to change our emotions despite the fact that they are in conflict with what we believe (D'Arms & Jacobson 2003; Sripada 2014).

It is important to emphasize that recalcitrance to reason does not hold in all cases, and arguably not even in the majority of cases. Although our cognitions *can* fail to affect what elicits our emotions, in many other cases they affect them very straightforwardly. The literature tends to focus on cases like fear of flying or jealousy about one's lover, which often persist despite the fact that the agent's fittingness regulation has deemed them inappropriate. But there are plenty of other cases in which fittingness regulation effectively changes the circumstances in which we have emotions.

For example, if I determine that my disgust about gay marriage is unfitting because gay people love one another just like heterosexual people do, I am less likely to continue experiencing disgust about gay marriage in the future. If I determine that my love for my cheating partner is unfitting, I am less likely to

continue loving such partner in the future. If I determine that envy toward my wealthy neighbor is unfitting because he is dying of cancer, I am less likely to continue being envious of my neighbor in the future. And so on.

There is another important aspect of the relative independence of emotions from reason/cognition that explains how emotions can be the source of transformative forms of self-awareness. As Pascal (1670/1958) famously put it in the *Pensées*, “the heart has its reasons which reason does not know” (78). And when emotions, to broaden Pascal’s metaphor, have reasons that reason does not know, it is our belief system that needs to be updated in light of the epistemic deliverances of our emotions, not the other way around.

For example, I may believe there is nothing wrong with being overweight, and argue at length about the inappropriateness of fashion-induced standards of beauty. However, once I feel ashamed at my body in the mirror and my fittingness regulation endorses such assessment, I may conclude that my earlier belief that there is nothing wrong with being overweight was inappropriate, and decide to favor the distal goal of dieting over the proximal goal of eating fattening foods, thereby exercising self-control.<sup>14</sup>

In this case, the fact that emotions do not rely on the same representational system as reason/cognition becomes a boon to self-control, because the more important distal goal of dieting was simply not within the direct reach of reason/cognition. Note that the path I am describing here is a rather indirect way in which emotions can help set and shield distal goals. Compare love and shame. Garden-variety romantic love for your spouse involves the distal goal of being faithful to him or her. But shame about your being overweight does not involve the distal goal of being on a diet. In fact, shame arguably sets the proximal goal of hiding your flawed self from others, which will interfere with many of your distal goals.

At the same time, shame delivers a self-evaluation that one has failed to live up to an ego ideal which may prompt the agent to additional cognitive activity that eventually results in setting up the distal goal of being on a diet. Emphasizing that emotions have reasons that reason does not know is not the same as showing that reason is not involved at all in bringing about the benefits of emotion-powered forms of self-awareness on self-control. What it shows is simply that the assumption that self-control is the exclusive province of reason overlooks the complex

<sup>14</sup> The trouble, as D’Arms (forthcoming) points out, is when you are ashamed of features of your body that cannot be changed, concerning for instance how short you are or what color your skin is. In such cases, there are no distal goals you can set to change your body in the desired ways. If your fittingness regulation concludes that your shame is indeed appropriate even though unhelpful to you, shame may become a long-lasting engine of detrimental forms of world-avoidance, mood repair, and escape from the self that interfere with the pursuit of distal goals.

ways in way reason and emotion interact in prompting agents to set important distal goals and protect them from temptation.<sup>15</sup>

## 7.7. Conclusion

Self-control has been understood since Ancient Greece as reason winning in the battle with emotion. This is an idea that contemporary “divided mind” accounts of self-control take for granted, suggesting that emotions are the sources of the very disturbances that self-controlled people overcome. In this chapter, I have argued that this picture shortchanges emotions, neglecting their significant potential as tools for self-control.

I have argued that emotions can help self-control by virtue of how they motivate, by virtue of how they feel, and by virtue of how they evaluate the self. At the same time, each of these three channels can also lead emotions to undermine self-control. Thus, whereas a “divided mind” account recommends fostering self-control by preventing emotions from interfering, I recommend fostering self-control by developing affective strategies designed to harness the distinctive powers of emotions to work for self-control rather than against it.

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<sup>15</sup> Another manifestation of this complicated relationship is the phenomenon Arpaly and Schroeder (2000) have labeled “inverse akrasia,” which consists of failing to do what you judged best—perhaps on account of emotional responses you cannot control—only to discover that you in fact did what was best for you, contrary to your former judgment.

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