

The Psychology of Habit Formation and Christian Moral Wisdom on Virtue Formation

TIMOTHY J. PAWL

University of St. Thomas

timpawl@stthomas.edu

Abstract: In this paper, I provide an overview of the Christian moral wisdom with respect to virtue formation and character cultivation. I focus in particular on some warnings issued by the great teachers on these topics with respect to the motivations one ought to have in the Christian life. I then discuss some findings of contemporary psychology on habit formation which seem to be at odds with the warnings in Christian moral wisdom. I argue that while there is surface discord between the contemporary psychology of habit formation and Christian moral wisdom, there is in fact a deep concord between them.

Keywords: Habit formation, Christian moral wisdom, Dark night of the soul, Purity of heart, Reward insensitivity

Introduction

In this paper, I provide an overview of the Christian moral wisdom with respect to virtue formation and character cultivation. I focus in particular on some warnings issued by the great teachers on these topics with respect to the motivations one ought to have in the Christian life. I then discuss some findings of contemporary psychology on habit formation which seem to be at odds with the warnings in Christian moral wisdom. I argue that while there is surface discord between the contemporary psychology of habit formation and Christian moral wisdom, there is in fact a deep concord between them.¹

¹ This article contains the content and much of the wording of Pawl (2021), along with additional discussion of purity of intention, motives in disposition acquisition, and the dark night of the soul. I thank the editors of both articles, Mikael Leidenhag and Joanna Leidenhag, for permission to reuse those materials here.

1. Christian Moral Wisdom on the Cultivation of Character

Traditional Christian teaching emphasizes the importance of cultivating certain practices for the sake of growth in union with God. Jesus, for instance, encourages fasting, prayer, and almsgiving (Matthew 6:1-21). Later Christian traditions build upon this foundation with more specific practices, such as communal fasting during Lent, praying the liturgy of the hours, or praying the Rosary. Sets of such practices were sometimes codified as *rules of life*, for instance, the Rule of St. Benedict (Holzherr 2016), which came into existence in the early 6th century and still is lived in hundreds of religious communities today. These practices and ways of life are intended to weed out vices that are inhibiting one's growth in union with God and to cultivate virtues that help one love God better. In a word, the end goal for all these practices is *sanctification*.

Not only practices, but also virtuous dispositions, are required. For instance, St. Paul exhorts the Thessalonians both to prayerfulness and to gratitude (1 Thessalonians 5:16-18) and the Colossians to put on compassion, kindness, humility, meekness and patience (Colossians 3:12). St. Peter commands that Christians make every effort to supplement their faith with virtue (2 Peter 1:5). The message is clear: cultivating the virtues is not optional for Christians.

Christian tradition has produced a rich collection of texts, the purpose of which is to help the reader to grow in virtue. The desert monks of the 4th and 5th centuries, most influentially Evagrius Ponticus (345-399) and his disciple John Cassian (360-435) wrote numerous works providing advice. This advice influenced Pope Gregory the Great (540-604) and John Climacus (579-649) to continue writing in this tradition. Medieval authors such as Thomas Aquinas (1224-1274) and Thomas à Kempis (1380-1471) further expanded the genre. Post-medieval thinkers, too, have claim to many such texts, for instance, Ignatius of Loyola (1491-1556), Louis of Granada (1504-1588), Lorenzo Scupoli (1530-1610), Alphonsus Rodriguez (1532-1617), Robert Southwell (1561-1595), Frances de Sales (1567-1622), and John Owen (1616-1683). Even today, the tradition continues; for example, Dallas Willard (1935-2013) and N. T. Wright (1948-) have written books on Christian virtue formation.²

² For examples of these works, see Evagrius Ponticus (1972), John Cassian (2000), John Climacus (2012), Gregory the Great (2014; 2015; 2016; 2017; 2019), Thomas Aquinas (2012), Thomas à Kempis (2005), Ignatius of Loyola (1992), Louis of Granada (1985), Lorenzo Scupoli (2010), Alphonsus Rodriguez (2012a; 2012b; 2012c), Robert Southwell (1978), Frances de Sales (1994), John Owen (2015), Dallas Willard (2012), and N.T. Wright (2010). We have no treatises by female monastics on growth in virtue. There are some brief sayings of those women and some descriptions of their ways of life

The goal of all these thinkers was to help people grow in union with God. Scupoli puts the general view well at the very beginning of his famous work, *The Spiritual Combat*, when he says that the goal of a Christian in the spiritual life is “to reach the loftiest peak of perfection, and to unite yourself so intimately with God that you become one in spirit with Him...” (2010, 3).

Such union with God, on the human side, requires a realigning of one’s dispositions to be centered on the love of God. The Christian tradition is replete with practices to help cultivate such dispositions, some of which I mentioned above. These stable habits aren’t merely dispositions to certain actions, such as giving to the poor. This is because such action types are silent on the *motivation* for an action. That motivation, of course, matters. As Scupoli says, it isn’t enough to do “what is most pleasing to God.” We also have to do it “out of a willingness to please Him” (Scupoli 2010, 31). If I give to charity motivated solely by vainglory, I’m not cultivating the right sort of disposition for union with God. In fact, I’m hindering myself.

Not only must one be motivated by the right reasons; one must also *not* in addition be motivated by the wrong reasons. Scupoli claims that the spiritual life

Consists, finally, in doing all of this solely for the glory of His holy name, for only one purpose—to please Him, for only one motive—that He should be loved and served by all His creatures (Scupoli 2010, 6).

If you eat both to support your body and also out of an inordinate desire for the pleasures of food, you are not cultivating temperance, but rather gluttony. The one motive that Scupoli approvingly mentions here, that God should be loved and served by all his creatures, is not a *reward* for the devotee. It might be pleasant or invigorating to work for God’s glory – surely it is for such a person – but if that pleasantness is a chief reason *why* one is acting, one is falling short in the spiritual life.

We all know the pang of mixed motivation. If your beloved does a nice thing for you motivated by love and a wholesome desire to serve, it means much more than if he does it motivated by the fact that the neighbors are watching and he gets pleasure from the knowledge that his character is appreciated by others. If he nurses you back to health because he loves you and wants to be united with you, it means much more than if he does so significantly motivated by the fact that he wants the continued benefits of your trust fund.

that one could use to extrapolate their views on virtue formation; see Earle (2007), Swan (2001), and Ward (1987).

Of course I want to be united to you! But if I'm being honest, a significant reason why I'm helping you is also because I want those payments to keep coming in like clockwork.

I have yet to see a romantic comedy wherein the indisputable "good guy" for the female lead has said such a thing. To the extent that he serves with dubious intentions, to that extent we judge his service less praiseworthy. In fact, such service for dubious intentions has more in common with *use* than with love, and as such is not only less praiseworthy, but in fact becomes blameworthy the more those intentions take the fore.

We might view action solely for the love of God as the exemplar, even if we also realize that it is very likely unattainable for us in this life. Indeed, it seems that we always have some mixture of motives to our actions. If we introspect deeply and avoid self-deception, we often, perhaps always, find some lingering less-than-noble motivations. This is the way of things for graded goods. I want knowledge, though I realize I have and will always have some ignorance; I seek wisdom, though I know I have an admixture of folly, too; I seek peace, though I know of my internal strife. So it goes for motivation, too. Realizing that my knowledge will always have some admixture of ignorance doesn't make knowledge a less desirable good or something no longer to be sought. Reducing my folly is still valuable, even if I'll never get to perfect wisdom this side of the eschaton (and maybe not at all!). So, too, purifying our motivation is a laudable activity, even if perfect purification, the goal, seems unattainable in this life.

One finds this sentiment – that one must serve God with purity of intention, serving God for God's sake and not for the rewards one receives – throughout the Christian Moral Wisdom literature. One finds it in the Prayer for Generosity, often attributed to St. Ignatius of Loyola.

Lord, teach me to be generous,
to serve you as you deserve,
to give and not to count the cost,
to fight and not to heed the wounds,
to toil and not to seek for rest,
to labour and not to look for any reward,
save that of knowing that I do your holy will.³

³ For a discussion of the authorship of this prayer, see Jack Maloney S. J.'s discussion of it here: https://www.thinkingfaith.org/articles/20120217_1.htm. I thank Fr. David Hottinger for bringing Fr.

Laboring and not looking for reward. Here we might claim, “wait a second, there is a reward listed there: knowing that one does God’s holy will.” True, but notice that this reward is purely intellectual and in fact precludes other rewards. In that respect, it is much more like a husband’s knowledge that he is doing service for his wife out of the right motivations, and not at all like a reward such as the neighbors thinking highly, or extra sleep, or a fine meal, or a celebratory gift to oneself. That is, it is not at all like the type of rewards that are most often put forward for growth in dispositions in the psychological literature I go on to discuss. In fact, it is a sort of reward one can only have if one is acting not for the sake of any other reward. That’s precisely the intention of the prayer – to preclude other such rewards.

The importance of one’s motives for action is sometimes discussed in the Christian Moral Wisdom tradition as *purity of heart*, following Christ’s words in the beatitudes (Matthew 5:8). This purification of heart requires a purity of intention in the person (Catholic Church 1995, paras. 2517–2533). Purity of intention is an ordering of our intentions such that we will things primarily for the good of conformity to the divine will, rather than for the beneficial results of those things we will.⁴

Louis of Grenada takes up this topic well in his *The Sinner’s Guide*. There, in Chapter 42, Section VI, he discusses the importance of purity of intention. Louis writes:

we must examine the motives of all our actions, that we may labor purely for God, since nothing is more subtle than self-love, which insinuates itself into every work, unless we maintain a constant guard. Many who now seem rich in good works will be found very poor at the day of judgment for lack of this pure intention. (Grenada 1985, 669)

Those people who discharge their duties, not from “the love of God or obedience to His divine will, but [from] their own interest,” while they may fool others into thinking that they are virtuous, “in the eyes of God it is as smoke; it is only the shadow of justice” (Grenada 1985, 670). Intention matters.

In the long Christian history of moral wisdom writings, we find two common cautionary refrains connected to the necessity of growth in virtue. First, the practices

Maloney’s discussion to my attention. I also thank Fr. Hottinger for discussions of the value of reward in the religious life.

⁴ See Treatise III of Alphonsus Rodriguez’s *Practice of Christian and Religious Perfection* for a detailed study of purity of intention.

that one performs in order to grow in virtue are not ends in themselves, but are rather aimed at the higher end of union with God. They are a means to higher goods and are to be taken as such. St. Thomas thought the same thing. He wrote, providing a quotation attributed to St. Jerome “one who prefers fasting to charity, or keeping vigils to the integrity of the senses, has lost the dignity of a rational human being” (T. Aquinas 2019, Quodlibet V, question 9, article 2). Fasting is for the sake of charity, and one acts below his dignity behaving otherwise.

Second, and relatedly, there is real danger in treating the creaturely goods, for instance, the joy or consolation that arise from the practices, as the *goals* of such practices. Virtue, as they say, is its own reward. It makes sense that one who is growing in virtue will benefit from that growth. The danger that arises here is that of loving the gift more than the Giver or loving the Giver just because of the goods of the gift.

The main conclusions of the Christian Moral Tradition that I want to highlight are as follows. For the Christian, the chief desired goal of our activity ought to be the glory of God and union with him. And to the extent that one forms habits with an eye toward the pleasantness of the activity, or toward some other valuable thing, one is misfiring, not forming the desired habit, not focusing on the right thing. Adding in additional motivations ruins one’s purity of intention, and purity of intent is vitally important, as Louis of Grenada makes clear. To the extent that one’s motives are impure, to that extent one is cultivating something other than virtue.

2. The Psychology of Habit Formation

Habit is a technical concept in Psychology. One recent edited volume on habit formation defines habits in terms of their formation through repetition in stable contexts:

habits can thus be defined as memory-based propensities to respond automatically to specific cues, which are acquired by the repetition of cue-specific behaviours in stable contexts. (Verplanken 2018, 4)

The idea is this. With enough activity of the same type in reliably stable situations, the need for intentional, goal-based control of the activity fades (Gardner, Bruijn, and Lally 2012; Verplanken 2018). Think of learning to drive a car. Switching lanes once took both your undivided attention and the frantic mental prayers of the person sweating in the passenger seat. Now, if you are a proficient driver, you likely change lanes multiple times without focusing on the activity. Significantly vary the

context, say, by driving in a congested construction zone, and the activity shifts back to being non-automatic.

Two notes on this definition of habit. First, a word about automaticity. Here it may sound as if the entirety of the action must be autonomous for an action to be habitual. After all, that's how lane changing typically works. But, in fact, the response that is automatic can be helpfully distinguished between the *instigation* and the *execution* of the behavior. Benjamin Gardner and Phillippa Lally (2018, 215–216) helpfully distinguish these varieties as follows: a habitually *instigated* behavior is a behavior “an actor is cued to automatically commit to performing”; a habitually *executed* behavior is a behavior that is “performed at least partly automatically.” With this distinction, we see that habituation, even habitually executed behavior, need not require complete automaticity. One can have the disposition to respond with gentleness yet still need to contemplate prudently what gentleness looks like in a situation. In other words, the automaticity required for habitual action need not bypass our rational control. This is a good thing, since many in the Christian tradition view the possession of habits, of which virtues are a subset, as requiring rational control.⁵ There is recent evidence, too, from psychology, that when it comes to habitual action, “a minimal level of favourable conscious motivation may be required to sustain behaviours over time” (Gardner, Lally, and Rebar 2020).

Second, notice that the definition has no mention of reward. This is understandable. A definition of something is distinct from an account of how that thing comes to be. (We intuitively grasp this distinction as parents when we separate the discussion of what humans are from the discussion of where babies come from.) Concretely, what a habit is, and how one acquires a habit, are distinct questions, each with its own literature (Mazar and Wood 2018; Lally and Gardner 2013; Lally et al. 2010; Verplanken, Aarts, and Knippenberg 1997; Weiden et al. 2020). This section has thus far focused on what habit is. I now move to discuss how habit is formed.

Contemporary psychology offers useful empirical findings concerning how best to cultivate practices such that they remain as stable dispositions or habits. Given that such stable dispositions are exactly what Christians want with respect to prayer, thanksgiving, and many other virtues, the findings of the psychology of habit formation are of great value to a person trying to grow in virtue and eradicate vice. In fact, in many places the empirical findings confirm the utility of the practices of the Christian Moral Wisdom tradition (cf. (Pawl, Ratchford, and Schnitker 2021;

⁵ See, for instance, St Thomas Aquinas *ST. I-II* q.50 a.3 ob. 2 and ad. 2. For a recent discussion of automaticity, habit, virtue, and control, see Dahm and Breuninger (2021).

Pawl and Schnitker 2022)). That said, there are some apparent tensions between the psychology of habit formation and the teachings of the Christian Moral Wisdom tradition, perhaps none more pressing than the one I go on to discuss.

The tension arises from the necessary constituents for habit formation put forward by contemporary researchers on the topic. Psychologists of habit formation have found that the cultivation of a habit requires three things: a stable cue, an activity to perform, and a reward from the activity (Wood and R nger 2016, 305). When the lunchbell rings (cue) the students walk to the cafeteria (activity) and satisfy their appetites (reward). Lacking a cue, act, or reward, one may well act, but one will not form a stable disposition to act; one will not become disposed to the act; one will not acquire virtue.

Concerning habit acquisition, there is good reason to think that reward is necessary (Judah et al. 2018; Wiedemann et al. 2014). As Wood says of habit formation: "Context will smooth the way, and repetition will jump-start the engine, but if you aren't getting even a minor *reward* for your initial effort along the way, you won't get that habit to start operating on its own" (Wood 2019, 115). Psychologists make various distinctions between types of rewards (here I follow distinctions presented by Wood (2019, Chapter 8), though not necessarily her wording). There are *intrinsic* rewards, which are a direct result of the activity itself – say, the joy derived from jogging– and *extrinsic* rewards, which are indirectly related to the activity itself – say, the paycheck at the end of the month. Rewards can be *immediate* or *remote* – again, think of the joy of jogging and the eventual paycheck. And they can be *expected* or *unexpected* – like the difference between a paycheck and a bonus. Concerning these divisions, *immediate, intrinsic, unexpected* rewards work the best for habit formation, though for different reasons. Immediate rewards are better than remote, since the dopamine hit that results from a reward is chronologically and causally close to the lingering context cues for the action, and dopamine is essential for habit formation (Yin and Knowlton 2006; Wickens et al. 2007; Wang et al. 2011). As Wood (2019, 118) writes, "rewards have to be experienced right after we do something in order to build habit associations (context-response) in memory." For similar reasons, intrinsic rewards are better than extrinsic for habit formation. After all, the joy of the activity is most often immediately following the activity, whereas external rewards – a trophy, a bonus, an extra vacation day – are typically not immediate. This is not to say that such rewards will not motivate us – they certainly do – rather, the point is that extrinsic and remote rewards aren't as useful for habit formation as intrinsic, immediate rewards. Concerning unexpected rewards, such rewards cause a dopamine spike – "wow, look what I just got!" – and

so are good for associating the activity and the context cues. Wood (2019, 123) goes so far as to say that “*uncertain rewards* matter most.”

A second trait of habits that is important for the forthcoming discussion is *reward insensitivity* (Orbell and Verplanken 2020). As Wood writes, “For scientists, *insensitivity* to reward is the gold standard for identifying a habit” (Wood 2019, 126). The idea is this: How does one tell from the outside when another’s activity is cued automatically rather than a response to a foreseen reward? For instance, if one sees a person eating popcorn, how does one tell whether that person is mindlessly eating or whether he is eating for the gustatory pleasures that arise from the pleasant taste of the popcorn? Well, one can provide really lousy popcorn to people, assuming, reasonably, that no one would eat that stuff for the gustatory pleasures. One could then measure the amount of popcorn eaten and the eaters’ reported dispositions to eat popcorn to determine whether those with stronger dispositions for eating popcorn in theaters ate more of the lousy popcorn than those who lacked such dispositions. Psychologists, sneaky tricksters that they are, have done just that (Neal et al. 2011)! While the forming of the initial habit is due to reward, such that lousy popcorn would be detrimental to forming a popcorn eating habit, after habit formation, the activity of eating the popcorn is cued and performed independent of the reward of the activity. In short, habituated behavior is reward insensitive in a way that explicitly goal-directed behavior is not.

The main conclusions that I want to draw from the contemporary discussion of the psychology of habit formation are as follows. Forming a habit requires stability, repetition, and reward. The rewards that work best are intrinsic to the activity, immediate, and unexpected. While the formation of habit requires reward, the activity stemming from a formed habit does not need to be rewarding, and in fact is insensitive to a diminishment of the reward in question.

3. A Surface Tension

Theology is not only interested in habit formation, but in *virtuous* habit formation. It seems that psychology alone cannot tell us which habits are virtuous and which are not. It can only tell us which are easy to develop, which are hard, how to develop some effectively, what the necessary conditions for development are, which are correlated with higher marital satisfaction, less heart disease, and so on. Psychologists David DeSteno and Piercarlo Valdesolo make the same point:

As we said at the outset, we’re scientists, not theologians or philosophers, so we’re not appointing ourselves as the ones to define virtue for you. We can tell you how

the system works, but not how you should calibrate it. Still, once you have come up with your answer for what the golden mean of character is for you (and it may take a while), what we *can* do is give you some advice on how to achieve it. (DeSteno and Valdesolo 2013, 230)

To get an answer to the question, “how does one develop a virtuous habit?”, then, it seems that one must look to the findings of both psychology, on the one hand, and philosophy and theology, on the other. When bringing two or three disparate fields together, there is no guarantee that their research output will be consistent. In fact, in this particular case, there is initial reason to think that their teachings are not consistent.

One can see the beginnings of a tension in the following way. Contemporary psychology tells us that rewards are necessary for habit formation. Now, suppose you want to use this empirical knowledge for the betterment of your soul. Can you? It seems like maybe you cannot. For you would have to set up a reward schedule that you do not merely accept as a byproduct, but as an *intentional aspect* to your activity. You aren't merely noticing the, say, joy of serving. You are *aiming to experience* that joy. That's a target. Yes, a target for a further good. But a target, nonetheless. Were you attempting to put into practice the findings of psychology in your cultivation of virtue, and you were *not* to experience the joy of serving that you were explicitly aiming to experience, you would count your cultivation work as a failure. But, in explicitly acting on the motivation to experience the joys of serving as rewards, you would be aiming at motivations that, in intending them, would put you at odds with the desiderata of Christian Moral Wisdom – that one act out of love for God and explicitly eschew the other rewards. In short: The purity of intention required for Christian growth in virtue seems inconsistent with the reward structure required for acting informed by the habit formation literature. How am I to avoid focusing on the beneficial rewards and *at the same time* work to ensure that I attain those rewards for the sake of hardwiring virtuous dispositions?

4. Some Responses to the Tension

What are some things we might say in response to this tension?

Consider this first, I will argue, unsatisfactory, reply to the tension. One can *receive* reward without *aiming* for the reward. You may feel joy, for instance, when feeding your family, even though the joy isn't the explicit aim of the activity. So, one can become habituated without seeing the reward as an end in itself. There is no need to take the positive mental states that result from the practices as *ends*. Thus, one can satisfy the cautionary warning of the Christian Moral Wisdom without jeopardizing

the necessary conditions for habit formation. As Christian Miller says in a different context:

Rewards can work the same way with a virtuous person. The *goal* of someone who is compassionate is to help those in need. Period. However, a *by-product* of helping others could be feelings of joy, happiness, and contentment. While the focus is on the other person, some nice benefits can come along for the ride. (Miller 2017, 47)

Here Miller is not speaking to the tension I raise in this article. But he is nicely voicing the view of this first response: the reward is there as a by-product, and that by-product can do the needful work for habit formation without it being a goal of the person doing the activity.

In reply, I grant this point. One can form a stable disposition to feed one's family based, in part, on the rewards one feels when doing it, while at the same time having no explicit knowledge that one is doing so. The question here isn't "how can humans form habits at all?" The question is: "how can one live in conformity to the strictures of Christian Moral Wisdom and also act, informed by the psychology of habit formation, to form the right habits?" Consider the person who has knowledge of both the psychology of habit formation and Christian Moral Wisdom. Such a person wants to inculcate stable dispositions, sees (from psychology) that doing so requires a reward response to be valued, aimed for, and cultivated, and sees (from Christian tradition) that valuing and cultivating a reward response to the activities in question is contrary to purity of intention and so not to be done. What should such a person do? How do the desiderata of Christian Moral Wisdom *not* stymie the needful conditions for habit formation? How is living in accord with the desiderata of Christian Moral Wisdom *not* shooting oneself in the foot before a marathon? While this first potential response is not false, it does not cut to the heart of the matter.

A second, better sort of resolution to the tension, begins by noting some disparity of subject matter in the desiderata of Christian Moral Wisdom and the psychological findings concerning habit formation. The psychology of habit formation is discussing how to go from lacking a certain stable disposition to having it. The warning from Christian Moral Wisdom presumes one has a stable disposition to bring about the right ends, but warns against doing so for the wrong motivations. Maybe one can focus on the rewards during the period of *disposition acquisition*, then focus on God after stable formation of the disposition in a period of *disposition refinement*. There's reason from both psychology and theology to see this as a viable beginning to a solution.

Consider first the period of *disposition acquisition*. During that period, the psychologists tell us that rewards are necessary for habit formation. If you want to acquire a virtue, you'll need, as for all habits, some reward inherent to the activity being performed. Does such focus on reward in disposition acquisition run contrary to Christian Moral Wisdom? Not yet, at least so far as I see. In fact, I think we find *positive mention* of such initial rewards in Christian Moral Wisdom.

As an instance of positive mention of rewards in the initial stages of character formation, one might look to Aloyius Ambruzzi and his *A Companion to the Spiritual Exercises of Saint Ignatius*. There, he writes:

As mothers invite their children to their arms with sweets and playthings, so does God attract us to Himself through His creatures, as through so many gifts of His loving heart. (Ambruzzi 1951, 13)

Here we see God using sweets and playthings as gifts to lure the sinner back to his embrace. Or again, we find motivation based on reward positively discussed in *The Sinner's Guide* by Louis of Grenada. There he offers many motivations for living virtuously. The eleventh motivation is the goods in this life that one receives from virtuous living. He divides these goods into twelve privileges of virtue that one attains by means of virtue during this life. Here the rewards that God gives to the virtuous are listed in great detail as motivational for being a virtuous person; for instance, the peace of a good conscience that the virtuous enjoy (privilege 5), God's care for the temporal needs of the virtuous (privilege 11), and the gift of a happy death (privilege 12).

One finds similar thoughts in scripture. Think, for instance, of the promises of reward that God offers to the Jewish people in return for their love and obedience to him (see, for instance, Deuteronomy 11 and 28). Here, in response for acting according to the virtues of love (often called *charity*) and obedience, God offers many rewards, including blessings of cities, children, crops, calves, baskets and bread, barns, etc.

So, it seems that the Christian Moral Wisdom tradition allows for rewards as motivations in the formation of habits, as required by the psychology of habit. Not only does Christian Moral Wisdom allow for such rewards, God explicitly uses such rewards as incentives for humans to begin acting in certain ways, as when he promises the Israelites rewards in exchange for their forming virtues of love and obedience. The tension looks to be alleviated at this step. Earthly goods are a viable initial motivation for acquiring virtue. What of the next step, disposition refinement?

Christian Moral Wisdom, as we have seen, teaches that we must purify our intentions so that we are motivated to act, and disposed to be motivated to act, in response to the most noble ends. In particular, it teaches that we should purify our intentions such that we aren't disposed to act to follow God because of the goods that God offers – “the sweets and playthings.” Consider a mundane case. A man begins spending time with a woman, treating her well, etc, because she has money and connections to get into local shows he yearns to see. As time goes on, their relationship blossoms, but all the while in large part because of the goods she provides. It would be a noble thing if, at some point, he could say to her: “Esmerelda, when we started our life together, I came initially because of your cash and your backstage passes. But I've come to see that you are more valuable than either of those things. I love you for you, not for those other things.” Get a handsome guy to say something like that in the rain as some quirky indie pop swells and you have the perfect ending for a romantic comedy.⁶ His intents have been purified; he is focused on the highest good – union with the beloved – for the sake of such union, not on other, lesser goods.

This revisiting and revising the rewards for stabilized dispositions may at first appear problematic for maintaining the disposition. Suppose I begin acquiring a disposition to prayerfulness in large part due to the sweet consolations I receive in prayer. Once those benefits are removed or at least deemphasized, wouldn't that hinder my maintaining habitual prayerfulness? This need not be the case.

Recall reward insensitivity, according to which habits are activities that continue on cueing, even when the reward is removed. Similarly, the emphasized rewards in forming a disposition to gratitude can be deemphasized after the stable disposition is formed, and yet the disposition remain, just as a disposition to eat popcorn can remain even when the gustatory value is removed. In fact, this continued habituation is even more expected in the case of prayer than it is in the case of popcorn. For in the popcorn case, the researchers found that when the seen benefit of an habituated activity is removed *and no better good is added*, then the activity can remain. If the initial benefit is removed *and a better good is added*, all the more reason to expect the activity to remain.

Such pruning of dispositions can occur while the rival goods remain, but it can also happen after they have been removed. Perhaps the woman's funds run out and she loses her standing in the arts community, such that the man no longer receives the goods that initially drew him to her. In such a case, he may reflect upon his

⁶ This is not dissimilar to the plot of existing romantic comedies; cf. “She's All That” and “10 Things I Hate About You.”

situation and realize that this will benefit what really matters to him, his loving union with her. His intentions with respect to her have been purified.⁷

Does Christian Moral Wisdom contain any reason to believe that God might act so as to remove the rival goods to help a person purify his intentions? I believe that there is. In spiritual theology there is a notion of the *dark night*. A dark night (or *dark night of the soul*) is a situation in which one lacks the feelings of (i) God's presence, (ii) the goodness of one's spiritual practices, and (iii) the certitude of God's presence and promises. One finds discussion of this phenomenon particularly among the Carmelites, especially St. John of the Cross (1542-1591) whose poem, *Dark Night of the Soul*, gives the phenomenon its name.

The dark night of the soul has seen other use in the psychological sciences.⁸ Typically it is discussed as a transformative negative event – the death of a loved one, a terminal medical diagnosis, hitting “rock bottom,” etc - through which people can grow. The idea is that one can persevere through the dark night to come out stronger on the other side.

I think that there is a second way to view the dark night that is more useful for the current situation. A dark night could be useful in turning the Christian from the gift to the giver. For a dark night by its very conception removes the rewards most likely to be illicitly focused on, the *feeling* of God's presence, the *delights* of one's spiritual practices, etc. It aims at detachment from earthly goods and deeper attachment to God.

As Kieran Kavanaugh describes the dark night in his translation and introduction to St. John's poem,

God is likened to a loving mother who first nurses her child, carries and caresses it in her arms, but who then must wean it, teach it both to walk on its own and to put aside the ways of childhood. (1991, 355)

Here Kavanaugh describes the dark night in ways the closely parallel Ambruzzi's discussion of God's initial drawing of humans to him. In the initial stage, God gives rewards and pleasures to the soul ascending to him. But then he removes those joys (weaning, walking on its own) for the sake of a greater good of maturity for the person. Notice that a dark night is of limited use when a person is first coming to faith or right relationship with God. No mother would first attempt to teach walking before carrying the child; no mother could possibly wean *prior* to nursing. It is only

⁷ This is the sort of thing that happens in the movies mentioned in the previous footnote.

⁸ See, for instance, Coe (2000), Durà-Vilà and Dein (2009), and May (2009). For a recent philosophical discussion of psychology and the dark night of the soul, see Bungum (2013).

after the relevant virtues are acquired and it is time to refine them that a dark night would seem most beneficial. And that's precisely where one finds it discussed in Christian Moral Wisdom.

For these reasons, the second stage, that of *disposition refinement*, does not seem to hold a tension, either. Christian Moral Wisdom teaches that at this stage one's intention is purified, such that the motivations one has for virtuous activity are the most noble – God's glory and one's union with God. This is sometimes done by means of a dark night of the soul, wherein God, in his goodness, removes the creaturely goods that are crowding out such noble motivation, for the sake of the Christian. Psychology allows for this motivational change and diminishment of reward. In fact, Psychology has found that habits are insensitive to reward diminishment, and so, far from a tension, we see a deep concord between psychology and Christian moral wisdom on this point.

Conclusion

There is an initial tension in the teachings of Christian Moral Wisdom and the psychology of habit. Christian Moral Wisdom requires forming dispositions that have a purity of intention – dispositions to act for God's sake, not for the benefit of some created good that accrues to the actor, such as joy or pleasure. The psychology of habit teaches that habit formation requires reward schedules, and that to form a habit one ought to build into the activity a reward structure, such as joy or pleasure. Determining how one could both fulfill the command to eschew rewards and also diligently work to include them is a puzzle.

While there is surface dissonance, there is deep harmony between Christian Moral Wisdom and the psychology of habit. This becomes visible when one distinguishes two stages in habitual formation: acquisition and refinement. Psychology tells us that virtue acquisition requires a reward structure. Christian Moral Wisdom is consonant with such reward, and in fact includes various positive discussions of the rewards associated with virtue, which we saw from Ambruzzi and Grenada. Christian Moral Wisdom tells us that virtue refinement requires working toward purity of intention, such that created rewards are not the aim of our virtuous activities. Psychology is consonant with that shifting of reward, and in fact includes an account of reward insensitivity in habitual action. The importance of both (i) rewards for habitual acquisition and (ii) purification of intent for habitual refinement are brought together clearly in the literature on the dark night of the soul.

The reward that the psychology of habit formation claims is necessary for virtue acquisition is not only consistent with Christian Moral Wisdom; Christian Moral

Wisdom in fact *includes* the very sorts of rewards Psychology deems necessary. The desiderata from Christian Moral Wisdom that one must not confuse the beloved with His gifts, and that one must purify her intent to grow in union with God is not only consistent with the findings of Psychology; Psychology in fact *includes* an account of reward insensitivity that explains how this could work without diminishing the habit itself. Thus, there is no deep tension here between Christian Moral Wisdom and the Psychology of habit formation – in fact, the opposite.⁹

Bibliography

- Ambruzzi, Aloysius. 1951. *A Companion to the Spiritual Exercises of Saint Ignatius*. 3rd edition. Westminster, Maryland: The Newman Press.
- Aquinas, Saint Thomas. 2012. *Summa Theologiae: Complete Set*. Edited by The Aquinas Institute. Lander, Wyo.: Aquinas Institute.
- Aquinas, Thomas. 2019. *Thomas Aquinas's Quodlibetal Questions*. Translated by Turner Nevitt. New York, NY: Oxford University Press.
- Bungum, Donald. 2013. "Joint Attention, Union with God, and the Dark Night of the Soul." *European Journal for Philosophy of Religion* 5 (4): 187–210. <https://doi.org/10.24204/ejpr.v5i4.212>.
- Cassian, St John. 2000. *The Institutes*, Translated and Annotated by Boniface Ramsey. Translated by Boniface Ramsey. First Edition edition. New York: Newman Press of the Paulist Press.
- Catholic Church. 1995. *Catechism of the Catholic Church: Complete and Updated*. New York: USCCB Publishing.
- Climacus, Saint John. 2012. *Ladder of Divine Ascent, Revised Edition*. 3rd edition. Boston, Mass: Holy Transfiguration Monastery.
- Coe, John H. 2000. "Musings on the Dark Night of the Soul: Insights from St. John of the Cross on a Developmental Spirituality." *Journal of Psychology and Theology* 28 (4): 293–307. <https://doi.org/10.1177/009164710002800408>.
- Dahm, Brandon, and Matthew Breuninger. 2021. "Virtue and the Psychology of Habit." *American Catholic Philosophical Quarterly*. <https://doi.org/10.5840/acpq2022119245>

⁹ I thank Joanna Leidenhag, Mikael Leidenhag, and Sarah Schnitker for helpful comments on a previous draft of this article. This work was supported by the John Templeton Foundation [61012, 2018-21]. In addition, this paper benefit from my participation in a summer seminar with the Beacon Project at Wake Forest University, funded by a grant from the Templeton Religion Trust. The opinions expressed here are those of the author and do not necessarily reflect the views of the John Templeton Foundation, the Beacon Project, or Templeton Religion Trust.

- De Sales, Francis. 1994. *An Introduction to the Devout Life*. Charlotte, NC: TAN Books.
- DeSteno, David, and Piercarlo Valdesolo. 2013. *Out of Character: Surprising Truths About the Liar, Cheat, Sinner (and Saint) Lurking in All of Us*. Reprint edition. New York: Harmony.
- Durà-Vilà, G., and S. Dein. 2009. "The Dark Night of the Soul: Spiritual Distress and Its Psychiatric Implications." *Mental Health, Religion & Culture* 12 (6): 543–59. <https://doi.org/10.1080/13674670902858800>.
- Earle, Mary C. 2007. *The Desert Mothers: Spiritual Practices from the Women of the Wilderness*. Harrisburg, Pa: MOREHOUSE PUBLISHING.
- Gardner, Benjamin, Gert-Jan de Bruijn, and Phillippa Lally. 2012. "Habit, Identity, and Repetitive Action: A Prospective Study of Binge-Drinking in UK Students." *British Journal of Health Psychology*. <https://doi.org/10.1111/j.2044-8287.2011.02056.x>.
- Gardner, Benjamin, and Phillippa Lally. 2018. "Modelling Habit Formation and Its Determinants." In *The Psychology of Habit: Theory, Mechanisms, Change, and Contexts*, edited by Bas Verplanken, 207–29. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-97529-0_12.
- Gardner, Benjamin, Phillippa Lally, and Amanda L. Rebar. 2020. "Does Habit Weaken the Relationship between Intention and Behaviour? Revisiting the Habit-Intention Interaction Hypothesis." *Social and Personality Psychology Compass* 14 (8): e12553. <https://doi.org/10.1111/spc3.12553>.
- Gregory the Great. 2014. *Moral Reflections on the Book of Job, Volume 1: Preface and Books 1-5*. Translated by Brian Kerns. Collegeville, Minnesota: Cistercian Publications.
- Gregory the Great. 2015. *Moral Reflections on the Book of Job, Volume 2: Books 6-10*. Translated by Brian Kerns. Collegeville, Minnesota: Cistercian Publications.
- Gregory the Great. 2016. *Moral Reflections on the Book of Job, Volume 3: Books 11-16*. Translated by Brian Kerns. Athens, Ohio: Cistercian Publications.
- Gregory the Great. 2017. *Moral Reflections on the Book of Job, Volume 4: Books 17-22*. Translated by Brian Kerns. Collegeville, Minnesota: Cistercian Publications.
- Gregory the Great. 2019. *Moral Reflections on the Book of Job, Volume 5: Books 23-27*. Translated by Brian Kerns. Place of publication not identified: Cistercian Publications.
- Grenada, Venerable Louis of. 1985. *The Sinner's Guide*. Translated by A. Dominican Father. English Language edition. Charlotte, NC.: TAN Books.
- Holzherr, Georg. 2016. *The Rule of Benedict: An Invitation to the Christian Life*. Translated by Mark Thamert. Collegeville, Minnesota: Cistercian Publications.

- John of the Cross. 1991. *The Collected Works of St. John of the Cross*. Translated by Kieran Kavanaugh and Otilio Rodriguez. Revised edition. Washington, D.C: ICS Publications.
- Judah, Gaby, Benjamin Gardner, Michael G. Kenward, Bianca DeStavola, and Robert Aunger. 2018. "Exploratory Study of the Impact of Perceived Reward on Habit Formation." *BMC Psychology* 6 (1): 62. <https://doi.org/10.1186/s40359-018-0270-z>.
- Kempis, Thomas A. 2005. *The Imitation of Christ: A Spiritual Commentary and Reader's Guide. 1st Paperback Edition*. Notre Dame, Ind: Ave Maria Press.
- Lally, Phillippa, and Benjamin E. Gardner. 2013. "Promoting Habit Formation," *Health Psychology Review* 7: 137–158. <https://doi.org/10.1080/17437199.2011.603640>.
- Lally, Phillippa, Cornelia H. M. van Jaarsveld, Henry W. W. Potts, and Jane Wardle. 2010. "How Are Habits Formed: Modelling Habit Formation in the Real World." *European Journal of Social Psychology* 40 (6): 998–1009. <https://doi.org/10.1002/ejsp.674>.
- Loyola, St Ignatius of. 1992. *The Spiritual Exercises of Saint Ignatius*. Translated by George Ganss SJ. St. Louis: Loyola Press.
- May, Gerald G. 2009. *The Dark Night of the Soul: A Psychiatrist Explores the Connection Between Darkness and Spiritual Growth*. Zondervan.
- Mazar, Asaf, and Wendy Wood. 2018. "Defining Habit in Psychology." In *The Psychology of Habit: Theory, Mechanisms, Change, and Contexts*, edited by Bas Verplanken, 13–29. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-97529-0_2.
- Miller, Christian B. 2017. *The Character Gap: How Good Are We?* 1 edition. Oxford University Press.
- Neal, David T., Wendy Wood, Mengju Wu, and David Kurlander. 2011. "The Pull of the Past: When Do Habits Persist despite Conflict with Motives?" *Personality & Social Psychology Bulletin* 37 (11): 1428–37. <https://doi.org/10.1177/0146167211419863>.
- Orbell, Sheina, and Bas Verplanken. 2020. "Changing Behavior Using Habit Theory." In *The Handbook of Behavior Change*, edited by Martin Hagger, 178–92. Cambridge; New York: Cambridge University Press.
- Owen, John. 2015. *Overcoming Sin and Temptation*. Edited by Kelly M. Kapic and Justin Taylor. Redesign edition. Crossway.
- Pawl, Timothy J. 2021. "Do Recent Findings in the Psychology of Habit Formation Contradict Christian Moral Wisdom on Virtue Formation?" *Theological Puzzles*, no. 3: <https://www.theo-puzzles.ac.uk/2021/08/30/tpawl/>.

- Pawl, Timothy, Juliette L. Ratchford, and Sarah A. Schnitker. 2021. "Growth in Patience in Christian Moral Wisdom and Contemporary Positive Psychology." *Journal of Beliefs & Values* 42 (3): 333–47. <https://doi.org/10.1080/13617672.2020.1836897>.
- Pawl, Timothy, and Sarah A. Schnitker. 2022. "Christian Moral Wisdom, Character Formation, and Contemporary Psychology." *American Catholic Philosophical Quarterly* 96, 2: 215–233. <https://doi.org/10.5840/acpq2022120247>.
- Ponticus, Evagrius. 1972. *Evagrius Ponticus: The Praktikos. Chapters on Prayer*. Translated by John Eudes Bamberger. 2nd ed. edition. Spencer, Mass: Cistercian Publications, 4.
- Rodriguez, Alphonsus. 2012a. *Practice of Christian and Religious Perfection: Volume I of III*. Edited by Paul A. Boer. CreateSpace Independent Publishing Platform.
- Rodriguez, Alphonsus. 2012b. *Practice of Christian and Religious Perfection: Volume II of III*. Edited by Paul A. Boer Sr. CreateSpace Independent Publishing Platform.
- Rodriguez, Alphonsus. 2012c. *Practice of Christian and Religious Perfection: Volume III of III*. Edited by Paul A. Boer Sr. CreateSpace Independent Publishing Platform.
- Scupoli, Lorenzo. 2010. *The Spiritual Combat: And a Treatise on Peace of Soul*. Charlotte, NC: TAN Books.
- Southwell, Robert. 1978. *Two Letters and Short Rules of a Good Life*. Associated University Presse.
- Swan, Laura. 2001. *The Forgotten Desert Mothers: Sayings, Lives, and Stories of Early Christian Women*. New York: Paulist Press.
- Verplanken, Bas, ed. 2018. *The Psychology of Habit: Theory, Mechanisms, Change, and Contexts*. 1st ed. 2018 edition. New York, NY: Springer. https://doi.org/10.1007/978-3-319-97529-0_1.
- Verplanken, Bas, Henk Aarts, and Ad Van Knippenberg. 1997. "Habit, Information Acquisition, and the Process of Making Travel Mode Choices." *European Journal of Social Psychology* 27 (5): 539–60. [https://doi.org/10.1002/\(SICI\)1099-0992\(199709/10\)27:5<539::AID-EJSP831>3.0.CO;2-A](https://doi.org/10.1002/(SICI)1099-0992(199709/10)27:5<539::AID-EJSP831>3.0.CO;2-A).
- Wang, Lei Phillip, Fei Li, Dong Wang, Kun Xie, Deheng Wang, Xiaoming Shen, and Joe Z. Tsien. 2011. "NMDA Receptors in Dopaminergic Neurons Are Crucial for Habit Learning." *Neuron* 72 (6): 1055–66. <https://doi.org/10.1016/j.neuron.2011.10.019>.
- Ward, Benedicta. 1987. *Harlots of the Desert: A Study of Repentance in Early Monastic Sources*. Unknown edition. Kalamazoo, Mich: Cistercian Publications.
- Weiden, Anouk van der, Jeroen S. Benjamins, Marleen Gillebaart, Jan Fekke Ybema, and Denise de Ridder. 2020. "How to Form Good Habits? A Longitudinal Field

- Study on the Role of Self-Control in Habit Formation." *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2020.00560>.
- Wickens, Jeffery R., Jon C. Horvitz, Rui M. Costa, and Simon Killcross. 2007. "Dopaminergic Mechanisms in Actions and Habits." *The Journal of Neuroscience* 27 (31): 8181–83. <https://doi.org/10.1523/JNEUROSCI.1671-07.2007>.
- Wiedemann, Amelie U., Benjamin Gardner, Nina Knoll, and Silke Burkert. 2014. "Intrinsic Rewards, Fruit and Vegetable Consumption, and Habit Strength: A Three-Wave Study Testing the Associative-Cybernetic Model." *Applied Psychology. Health and Well-Being* 6 (1): 119–34. <https://doi.org/10.1111/aphw.12020>.
- Willard, Dallas. 2012. *Renovation of the Heart: Putting On the Character of Christ*. 10th Anniversary ed. edition. Place of publication not identified: NavPress.
- Wood, Wendy. 2019. *Good Habits, Bad Habits: The Science of Making Positive Changes That Stick*. New York: Farrar, Straus and Giroux.
- Wood, Wendy, and Dennis Runger. 2016. "Psychology of Habit." *Annual Review of Psychology* 67 (1): 289–314. <https://doi.org/10.1146/annurev-psych-122414-033417>.
- Wright, Tom. 2010. *Virtue Reborn*. London: SPCK Publishing.
- Yin, Henry H., and Barbara J. Knowlton. 2006. "The Role of the Basal Ganglia in Habit Formation." *Nature Reviews Neuroscience* 7 (6): 464–76. <https://doi.org/10.1038/nrn1919>.

Published Online First: September 24, 2022