

BERYS GAUT

Creativity and Rationality

“One must, I say, be a *visionary*, make oneself a *visionary*. The poet makes himself a *visionary* through a long, a prodigious, and rational disordering of *all* the senses. Every form of love, of suffering, of madness; he searches himself, he consumes all the poisons in him, keeping only their quintessences.”¹ Thus did Arthur Rimbaud, in a letter dated May 15, 1871, to his friend, Paul Demeny, announce his self-conception of his avocation as a poet. The seventeen-year-old poet’s manifesto bears ample testimony to the idea of the poet as madman, but it also points in a contrary direction, to the poet as a rational being, in that telling phrase, “raisonné *dérèglement de tous les sens*” (rational disordering, or reasoned derangement, of all the senses). The tradition of the poet as a rational being is as venerable as that of the poet as fundamentally irrational, and one may wonder what Rimbaud was after in his apparently paradoxical self-identification with both views. Part of what I argue in this article is that Rimbaud’s paradox is no paradox at all, that one should understand certain exercises of creativity as involving both rational and irrational aspects. There is thus a way in which the traditions of thinking of creativity as an irrational disposition and of thinking of it as a rational disposition are both correct, a point for which I argue partly on philosophical and partly on psychological grounds. But I also argue that this composite view is fundamentally rationalistic in character, for exercises of creativity, even when they incorporate irrational elements, are *necessarily* rational in a certain respect.

I. TWO TRADITIONS

I begin with a very brief sketch of the two traditions, with the aim of counseling against

a cursory dismissal of either view, since both number eminent philosophers and literary writers among their adherents.

i. Irrationalism. The idea of poetic creativity as fundamentally irrational has its earliest philosophical expression in Plato. In *Phaedrus* he says that “if any man come to the gates of poetry without the madness of the Muses, persuaded that skill alone will make him a good poet, then shall he and his works of sanity with him be brought to nought by the poetry of madness, and behold, their place is nowhere to be found.”² According to Plato, there are four kinds of divine madness—love, prophesy, Bacchic celebration, and poetry—and poetry is the lowest of these.³ Plato draws on the earlier Greek idea of poetry as an inspiration from the Muses, but he seems to have been the first to construe inspiration as a kind of madness.⁴ His chief argument, to which I will return, is presented in *Ion* and holds that poetic emotions are fundamentally irrational, since they are felt even when there are no events that would justify them.

Plato’s charge of madness proved to be enormously influential, not least on poets, whose attestations run from John Dryden’s famous couplet, “Great wits are sure to madness near allied, / And thin partitions do their bounds divide” to Byron’s more pithy summation, “We of the craft are all crazy.”⁵

It also continued to find philosophical defenders, who developed arguments different from Plato’s. Arthur Schopenhauer argues at length in *The World as Will and Representation* that genius is “closely akin to madness,” on the grounds that both the genius and the madman abandon the Principle of Sufficient Reason, chiefly the claim that every event has a cause.⁶

Friedrich Nietzsche too stands in the irrationalist tradition. In *The Birth of Tragedy* he traces the demise of classical Greek tragedy to Euripides, whom Nietzsche accuses of “aesthetic Socratism,” the introduction of reason into the aesthetic realm.⁷ For Nietzsche, the power of tragedy essentially depends on its Dionysian wisdom, of the underlying, primordial unity of all things, which can be grasped only by instinct, not by reason. And Nietzsche avers that reason undermines creativity, for creative accomplishment depends on instinct, whereas reason can only be critical: “While in all productive men it is instinct that is the creative-affirmative force, and consciousness acts critically and dissuasively, in Socrates it is instinct that becomes the critic, and consciousness that becomes the creator—truly a monstrosity *per defectum*!”⁸

ii. *Rationalism.* Though it was less influential, the tradition that holds that creativity is a rational disposition is coeval with the irrationalist view, for it is also to be found in Plato. Plato’s charge of irrationality is made specifically against the poets: in contrast, he holds, in some dialogues at least, that painters, musicians, and sculptors, whom we would now regard as artists, are following a craft (*technē*), and craft for Plato is a rational activity.⁹ Also, in *Timaeus* the demiurge who creates the universe, that ultimate act of creation, exercises reason in crafting the world out of disordered matter, following the patterns laid out in the eternal forms.¹⁰

Unlike Plato, Aristotle defends the rationality of poetic creativity, though the significance of his response has, through textual bad luck, often been missed. He is frequently quoted, not least by psychologists, as saying that all men who are outstanding in philosophy, poetry, and the arts are melancholic. So holds the author of the *Problems*, but that author is not Aristotle, for the work is largely a product of the later Peripatetic school.¹¹ There is, however, a passage in the *Poetics* in which Aristotle says that “poetry demands a man with a special gift for it, or else one with a touch of madness in him; the former can easily assume the required mood, and the latter may actually be beside himself with emotion.”¹² But as several scholars have argued, the claim that a poet might be mad in making his art is inconsistent with the basic framework developed in the *Poetics*, and there is textual ev-

idence, derived from an early Arabic translation, that Aristotle wrote not “or else” one with a touch of madness, but “rather than” one with a touch of madness.¹³

Aristotle’s account of the composition of poetry holds it to be a process of making (*poiēsis* in Greek), which, like all such processes, starts with some goal, refines that goal, and develops means to it. For tragedy, the goal is to elicit fear and pity in the audience with the aim of achieving a catharsis of these emotions (*Poetics*, chapter 6). The means to achieve the goal include a type of plot that involves reversals of fortune and recognition (chapters 6 and 11), and characters worthy of pity (chapter 13). Tragedy is thus accorded a teleological analysis, and Aristotle also applies that analysis to how it should be made: in chapter 17, for instance, he advises the poet to sketch out first the general structure of the plot, which generates the basic tragic emotions, before filling in the details of the episodes. For Aristotle, then, poetic creation is a rational activity of making, involving the selection and refinement of suitable goals and the use of the best means to achieve them.

The theory of creation as a rational activity was adopted in the Christian account of God’s creation of the world as the exercise of rational agency, filtered through neo-Platonic sources, but it seems to have had less influence than the irrationalist tradition on the narrower question of artistic creation, despite the Renaissance analogizing of the artist to God.¹⁴ But it still appears intermittently, and even at the height of Romantic theorizing, in Charles Lamb’s 1826 essay, “Sanity of True Genius,” where Lamb remarks, “It is impossible for the mind to conceive of a mad Shakespeare.”¹⁵ It also has a contemporary defender in Jon Elster, who argues that all artistic creation is a matter of an artist aiming to maximize artistic value, subject to constraints.¹⁶ But the worries about the rationalist view persist: Jerrold Levinson, in criticizing Elster’s account, objects that the view makes artistic creation too predominantly rational an activity.¹⁷

II. CLARIFYING THE CLAIMS

Though there are two broad traditions, there are many different kinds of claims in each tradition. So we need to clarify some concepts.

i. Mental Illness and Irrationality. First, consider the relation of mental illness to irrationality. Being irrational does not entail being mentally ill: if I fail to get out of bed, though I judge that I really ought to do so, I am weak willed. I am thereby irrational in my action, for it is not guided by what I judge that I have most reason to do. However, though I am irrational, I am not mentally ill—otherwise most of us would be mentally ill much of the time.

Conversely, does being mentally ill entail that one is irrational? Full-blown schizophrenia typically involves extreme cognitive delusions, such as believing that one is being controlled by an alien force or that one possesses supernatural powers. These are extremely irrational beliefs. Consider, though, mood disorders, such as manic depression (also known as bipolar disorder); in milder cases there are no severe cognitive distortions, but the sufferer feels grinding depression or manic elation. Are these cases of mental illness without irrationality? Not so. Besides theoretical irrationality, the irrationality of beliefs, and practical irrationality, the irrationality of actions, such as weakness of will, there is affective irrationality, the having of irrational emotions and feelings. Someone who suffers from a fear of spiders may know that the feared spiders are perfectly harmless, so he is not cognitively irrational. But he is still irrational, for the fear is not grounded in its object; he knows the object is not dangerous. The chronically depressed bipolar patient, though he knows that nothing particularly bad is happening, is affectively irrational. Once we acknowledge the existence of affective irrationality, we should hold that being mentally ill entails being irrational.

ii. Rationality and Irrationality. What is meant by talk of rationality and irrationality? A person is rational just in case she is appropriately sensitive to reasons. If I believe it is raining because I see that it is raining, I am in that respect rational; my belief is sensitive to the perceptual evidence. It is *appropriately* sensitive, since I take my seeing the rain to be evidence *for* there being rain, rather than being evidence *against* it.

To say that I am irrational is to impugn my rationality, but not just any failure of appropriate sensitivity to reasons indicts someone of irrationality. If someone fails to understand a complex chain of reasoning that supports a mathematical proof, she is not sensitive to all the rele-

vant, mathematical reasons, but she is not thereby irrational. For the reasons are too abstruse and specialized for such an indictment to be reasonable. So the reasons, failure of appropriate sensitivity to which impugns someone as irrational, must be ones that are graspable to an ordinary person. They must be, as I will say, *clear and evident* reasons.

Reasons come in different sorts. Since rationality is a matter of appropriate sensitivity to reasons, one can be rational in respect of some reasons, but irrational in respect of others. My weak-willed slumbering in bed makes me practically irrational, but I need not thereby be cognitively irrational; my belief that I ought to get up is a rational one, grounded on my awareness of the need to get some work done. My problem is that I do not act appropriately on that belief. Cognitive, affective, and practical reasons can be independent of each other. Even within these broad types of reasons, rationality may fail in one respect, but not in others. A person may be irrational in respect of some beliefs, but not others: she may be irrational in respect of beliefs about matters that affect her self-interest, but rational in respect of her other beliefs, for instance.

The moral is that when we inquire whether someone is rational or irrational, a full answer to that question requires us to specify *in what respects* the person is rational or irrational, and the overall judgment of rationality or irrationality is a summary judgment, in light of these more specific judgments.

Finally, judgments of rationality or irrationality apply to many mental states or doings, such as beliefs, feelings, and actions, but not to all such states. Some, for instance, have no representational content and, therefore, judgments of rationality get no grip. If I am in pain because you strike me hard, I am not thereby rational; nor, if I feel no pain, am I thereby irrational. There is a reason why I do or do not feel pain, but that is a reason in the sense of a causal explanation, not in the sense of a normative fact. My response of pain is not rational nor is it irrational; it is, as I will put it, nonrational.

III. OBJECTIONS TO RATIONALISM

The advantage of adopting a rationalist, broadly Aristotelian line is that it holds that creative activities fall into a class of activities with which

we are familiar, namely, rational makings of one sort or another. Cooking a meal is a rational activity, involving a worthwhile end (having something nourishing to eat) and taking the appropriate means to that end; making a chair similarly involves adopting a valuable goal and taking a more complex series of steps to realize it. These actions of making things exhibit both final rationality (since the end pursued is worthwhile) and instrumental rationality (since the means are appropriate to achieving that end). They raise no special puzzles or difficulties: there is no place for puzzling talk of divine inspiration, subconscious irrational processes, and so on. Paradigm examples of creative activity neatly fit this model: an artist producing a creative painting has the aim of producing a work with certain valuable qualities and takes appropriate means to secure that end. So let us begin by assuming that creative activities involve this kind of familiar rational making and consider some objections to it, drawn from the irrationalist tradition.¹⁸

i. Plato and the Paradox of Fiction. The strongest of the philosophical objections is Plato's argument in *Ion*. There Socrates says of Ion, the rhapsode, who recites poetry to crowds:

There he is, at a sacrifice or festival, got up in holiday attire, adorned with golden chaplets, and he weeps, though he has lost nothing of his finery. Or he recoils with fear, standing in the presence of more than twenty thousand friendly people, though nobody is stripping him or doing him damage. Shall we say that the man is in his senses?¹⁹

Plato's charge is that the emotions of poetry are irrational: the poet, the rhapsode, and his audience may feel fear or sorrow, though they know that nothing bad has really happened. But surely an emotion directed toward an object that one believes does not exist is an irrational emotion. This is the earliest extant formulation of one version of the paradox of fiction.

One might object that to impugn the rationality of the listeners and reciters of poems is not to impugn the poet's rationality: the emotional rumblings of her audience may bear no relation to the poet's own feelings. But that reply will not answer Plato's charge: the poet, if she is to test the success of her poetic communication, should put herself in the place of her audience, so if the audience's

state of mind is irrational, so is her mental state when she takes up their position.

However, one should reject the charge of irrationalism. First, emotions can be rationally felt even toward objects one only imagines to exist: for instance, one can imagine events and feel genuine emotions toward them as part of a rational process of planning what to do, such as deciding what career one should pursue. Second, if all responses to fictions were irrational, as Plato alleges, we could not discriminate, as we do, between those responses that are clearly irrational (for example, fearing the innocent victim in a horror film) from those that are not (for example, fearing the serial killer who threatens him). Third, since emotions are ubiquitous in our responses to fictions, were these emotions systematically irrational, we would have to hold that all artworks that are works of fiction (a large class) are fundamentally evaluatively flawed; but that is highly counterintuitive.²⁰

ii. Spontaneity. A second ground for challenging rationalist accounts of creativity derives from the observation that creative ideas often just "pop" into our minds: they come to us spontaneously, independently of the will. Henri Poincaré recounts how solutions to mathematical problems sometimes came to him without being immediately preceded by any conscious thought on the matter, citing examples when he was walking on a cliff, strolling down the street, and placing his foot on the steps of a bus.²¹ At a less exalted level, most of us have had the experience of ideas coming to us unbidden when in the shower or going for a walk; the experience has been dubbed by Margaret Boden "the bath, the bed and the bus."²² Since such thoughts arise independently of the will, one might argue that they are not subject to a rationalist account: since they arise independently of the will, they are not rationally assessable; and since they are not rationally assessable, they are irrational.

However, both steps of that argument are unsound. Consider the second step: even if spontaneous ideas were not subject to rational assessment, this would not support the irrationalist's claim that there is an irrational element to creativity. Irrational states are to be distinguished from nonrational ones, as we have seen. For some state to be irrational actually *requires* it to be subject to rational assessment; spontaneous states would therefore be nonrational, like pain as a sensation, but not irrational.

Nor is the first step sound, for mental states that arise independently of the will are sometimes rationally assessable. Beliefs are subject to rational assessment, though they are independent of the will.²³ We do not choose to believe that it is raining if we see that it is so; but the belief that it is raining is a rational one, since it conforms to the evidence; and the belief that it is not raining would in this case be irrational. Likewise, someone's fear of domestic spiders is not a state that is willed, but is nevertheless irrational, since spiders are not dangerous. Hence, at least some spontaneously generated states can be rationally assessed.

iii. Psychological Evidence about Creativity and Mental Illness. The most powerful evidence that the irrationalist can adduce in her favor is the considerable body of psychological data that supports a strong, though contingent, link between artistic creativity in particular and various kinds of mental illness.

Kay Jamison is a psychiatrist who is an expert on manic depression. She has documented that of the thirty-six major British and Irish poets born between 1705 and 1805, thirteen (that is, more than a third) were probably bipolar I (the most serious form of the disease), including Lord Byron, Percy Bysshe Shelley, Samuel Taylor Coleridge, William Blake, and William Cowper. A further six of the poets, including John Keats and Robert Burns, suffered from milder forms of the disease (bipolar II or cyclothymia). Jamison also studied forty-seven eminent contemporary British writers and artists and discovered that thirty-eight percent of them had been medically treated for a mood disorder. In contrast, only one percent of the general population suffers from bipolarity and another one to two percent from cyclothymia. The prevalence of bipolar disorder among writers and poets has been corroborated by other studies.²⁴ Jamison also suggests a mechanism for how bipolarity enhances creativity, arguing that manic phases are excellent for generating creative ideas, and normal or mildly depressed phases of the disease are ones in which the generated ideas can be subject to criticism, refinement, and elaboration.²⁵

Much work has also been done on the link between creativity in the arts in particular and schizophrenia-spectrum diseases and schizotypy. (Schizotypy is a syndrome of signs that correlate with a genetic liability for schizophrenia: signs include magical thinking, recurrent delusions, odd

speech, social isolation, and anxiety.) For instance, a study by Kinney and others examined thirty-six adults with schizophrenic biological parents who had been adopted by nonschizophrenic parents and a control group of a further thirty-six adult adoptees with nonschizophrenic biological parents. The subjects were independently assessed for schizotypal and schizophrenic signs and for creative achievements using the Lifetime Creativity Scales. For subjects without any schizotypal signs, the peak overall creativity rating was relatively low (with a mean of 1.64), it was higher in subjects with one schizotypal sign (a mean of 1.98), highest for subjects with two or more schizotypal signs but no schizotypal or schizoid personality disorder (a mean of 2.19), somewhat lower for subjects with a schizotypal or schizoid personality disorder (a mean of 2.12), and lowest for the single subject with schizophrenia (a mean of 1).²⁶ Other studies have shown a similar inverted-U distribution: full-blown schizophrenia undermines creativity, but, up to a certain point, increasing closeness to it measured by number of symptoms tends to enhance creativity. This kind of distribution provides evidence that a degree of irrationality may enhance creativity, but severe irrationality may undermine it.

The prevalence in creative people of these and a variety of other mental problems, including suicidal states, pathological anxiety, alcoholism, and drug abuse, has also been demonstrated in the most wide-ranging study of the relationship between mental illness and creativity to date. Arnold Ludwig examined 1,004 eminent individuals, about whom at least one biography was published in *The New York Times Book Review* between 1960 and 1990. The individuals studied were categorized into eighteen professions, including poetry, the visual arts, social and natural sciences, business, and exploration. Eighty-seven percent of the poets suffered from a mental disorder of some sort during their lifetimes, seventy-seven percent of fiction writers, fifty-one percent of social scientists, and twenty-eight percent of natural scientists.²⁷ Ludwig also showed that mental health problems were predictive of whether a person was in the top quartile or bottom quartile of achievement across the range of professions studied.²⁸ He also noted the same inverted-U distribution between creativity and mania, along with probably most forms of psychopathology, which we saw held in the Kinney study.²⁹

iv. Assessing the Evidence. The psychological evidence and its significance have been queried on various grounds. Psychologists are almost as disputatious as philosophers. I will consider three objections.

First, Robert Weisberg and others have objected that in some of these studies, evidence of mental illness is based on creative people's self-reports, but, given the prevalence of the belief that creativity and madness are associated, particularly in the Romantic era, which is the subject of Jamison's main study, creative people have reason to exaggerate their mental problems.³⁰

However, self-reporting is not employed in all such studies (for instance, it is not employed in Ludwig's and Kinney's research). More importantly, the degree of problems reported in some cases is evidence of mental problems, whatever the artist's beliefs about the link between creativity and madness: of the thirty-six major poets Jamison examines, two (Thomas Chatterton and Thomas Lovell Beddoes) killed themselves, and four (including Cowper) were committed to asylums. If an artist is so taken by the idea of being a mad genius as to kill himself or to act in ways that get him committed, that degree of adherence to the madness-creativity view is in itself good evidence of severe mental problems.³¹

Second, it may be noted that the correlation between mental illness and creativity does not establish the direction of any causal relationship between them. Perhaps creative activity causes mental illness, rather than vice versa.³² Creative activity, which goes beyond established routines and often results in many failures before something is achieved, may be stressful, and this may induce mental illness in some people.

It is plausible that this happens in some cases, particularly if the creative activity is part of a person's profession, and so more than intrinsic rewards hang on creative success. But in many cases the causal link plausibly runs from mental illness to creative activity. Mental illness typically starts in adolescence or early adulthood, a time that usually predates the launch of the career in which creativity is exercised. Moreover, mentally ill creative people often have close family relations who suffer from their illness or variants of it, but these relations may not be creative in any significant way.³³

Third, the correlation between creativity and mental illness holds much more strongly in some

domains, such as poetry, than in others, such as science. In Ludwig's study, twenty-eight percent of natural scientists suffered from lifetime mental illness, and this is slightly lower than the thirty-two percent of the population who suffer from it according to one study.³⁴ So if there is a causal connection between mental illness and creativity, the evidence suggests that it will obtain only in some domains, particularly artistic ones.

However, Ludwig also found that having a mental illness was predictive of whether an individual in his sample was in the upper quartile of achievement as opposed to the lower quartile across a wide variety of professions, including natural science.³⁵ So suffering from a mental illness makes it more likely in general that someone is highly creative rather than being creative at a less eminent level. Moreover, even if the causal relation held only in some domains, such as artistic ones, that would still constitute a threat to the rationalist model, since the model is a general one and so applies to creativity in all domains.

There is a way, though, to account for the variation in incidence of mental illness across domains that would undermine the link to creativity in any domain. For being mentally ill might explain why some people enter some domains, but it would play no role in explaining why they are creative in those domains. Perhaps the link is not between mental illness and creativity but between mental illness and which profession is chosen: a greater proportion of people with mental problems are attracted to becoming poets than scientists, but their mental illness has nothing to do with their creativity in these domains. Call this the *domain-preference hypothesis*.³⁶

Is this a good hypothesis? A good way to test it out is to consider an example. Blake claimed to be surrounded by the spirits of the dead and to have talked to Michelangelo, Raphael, Milton, Dryden, Voltaire, Satan, and others. Those who knew him took him to be sincere in these claims, and one friend, John Varley, asked him to sketch his visions. Here is Varley's account of one vision:

On hearing of this spiritual apparition of a Flea, I asked him if he could draw for me the resemblance of what he saw. . . . I felt convinced by his mode of proceeding, that he had a real image before him, for he left off, and began on another part of the paper, to make a separate drawing of the mouth of the Flea, which the spirit having

opened, he was prevented from proceeding with the first sketch, till he had closed it.

During the time occupied in completing the drawing, the Flea told him that all fleas were inhabited by the souls of such men, as were by nature bloodthirsty to excess, and were therefore providentially confined to the size and form of insects; otherwise, were he himself for instance the size of a horse, he would depopulate a great portion of the country.³⁷

Blake made two sketches of the flea during his vision, and later based a tempera painting on it: *The Ghost of a Flea* (1819, Tate Britain). The painting shows a strange, hybrid man-flea figure, posed in a theater-like setting of wooden floorboards, tightly enclosed by curtains, with a backdrop or open view of a night sky with four stars, the brightest of which is plummeting to the ground, indicative of the figure's fallen status. He resembles in basic shape a muscular man, but his scaly skin is toned golden red, green, and brown, and he has elongated, hooked fingers, wing-like plumes over his ears, and a head that is almost fused into the body by a short, muscular neck with prominent vertebrae. Between the index finger and thumb of his right hand he grasps a curved stinger, whose shape echoes that of his tongue, to pierce the skin of his victims. And in his left hand he grasps a bowl to contain their blood, into which his golden eyes stare intently and toward which his curved tongue obtrudes lasciviously.

According to the domain-preference hypothesis, Blake's bipolarity led him to choose painting and poetry as his domain of activity, but his illness had nothing to do with his creativity within the domain. That is highly implausible. Creativity requires the production of original and valuable items. The originality of *The Ghost of a Flea* derives almost entirely from Blake's visionary experience. Other features of the painting are relatively unoriginal: Blake's painting style, for instance, is derivative from his admired masters, primarily Michelangelo. Though the work is skillfully painted, its value largely depends on the strangeness and compelling nature of the image of the flea, particularly if we appreciate the work, as we should, in the context of its making as described by Varley. So the creativity of the work, and thereby Blake's creativity as its maker, depends on his vision, which derives from his susceptibility to the intense feelings and hallucinations associated with his severe bipolar illness. Hence, at

least sometimes an artist's creativity is dependent on the nature of his mental illness. So the psychological evidence poses the rationalist a challenge. The evidence supports a composite model, which holds that creative activities may involve both rational and irrational elements.

IV. THE RATIONALIST-COMPOSITE MODEL

In the light of this evidence, how should the rationalist respond? She should allow that irrational elements can play a role in creative activities in some cases, which favors a composite model. But this composite model has, I will argue, a fundamentally rationalist character, for certain exercises of rationality are necessary for creative activity.

i. Rational Irrationality. Begin by considering a result of rational choice theory. Thomas Schelling argues that it can be rational in certain conflict situations to impair one's rationality or even cause oneself to become irrational: this may, for instance, be the most rational response to extortion, since by becoming irrational one renders oneself insusceptible to certain threats.³⁸

A vivid thought experiment by Derek Parfit illustrates this.³⁹ Parfit imagines a case where a man breaks into your house. You call the police, but since your house is isolated, they will take some time to arrive. Meantime, the robber threatens to kill your children unless you open the safe, which contains your valuables. What should you do? It would be irrational not to open the safe, since your children would be killed; but it would also be irrational to open the safe, since the robber is still likely to kill you and your children to prevent you from recording the number of his car and reporting it to the police. Fortunately, you have a drug that will render you temporarily irrational: when the robber threatens to kill your children, you will beg him to do so, since you love them so much; and when the robber tortures you, you will plead for him to continue, since it is so painful. Confronted with this madman, the robber's best strategy is to flee without harming anyone, confident that you are so befuddled, you will not record his car number.

Parfit's fable is wildly entertaining and deeply improbable; but it succeeds in proving the possibility of cases of, in his phrase, "*rational irrationality*."⁴⁰ There are situations in which it is

rational, even rationally required, to make oneself irrational. Rational choice theory has long recognized this possibility for situations of conflict; my thought is that it is also possible in cases of creative activities, and indeed may be more common there. Sometimes, given someone's psychological set, a good or even required way of pursuing one's rational aim of being creative is to make oneself irrational to some degree or other, perhaps even by inducing mental illness in oneself. For the irrational person thinks or feels in nonstandard ways, and these may provide the germs for original ideas. Recall Rimbaud's reasoned derangement of all the senses: it was a rational attempt to induce states of extreme irrationality in himself for creative purposes; in practice it involved the ingestion of large quantities of hash and absinthe so as to induce visions. Judging by the quality of his poetry, he succeeded in his aim. He was rationally irrational. Nor was Rimbaud unique in pursuing this strategy: indeed, one of the main reasons for his becoming a poster boy for the 1960s counterculture was his imprimatur for the use of drug taking to enhance creativity, though his followers' results were generally less artistically successful.

There is a second class of cases. Bipolar disorder can be treated with lithium carbonate; but some bipolar writers and artists who are given this treatment decide to stop taking the pills, since they find the treatment reduces their creativity: in two studies, seventeen percent of such artists decided to stop taking the medicine.⁴¹ This is the converse case to Parfit's: rather than a drug inducing irrationality in someone rational, this drug induces rationality in someone irrational. But this is still a case of rational irrationality: if being in a state of irrationality promotes creativity in some people, and if their aim is to be creative, then it is rational for them to induce irrationality by refusing the drug. Given the prevalence of bipolar disorder among creative people, such cases may not be uncommon. Note, too, that if a person's overriding aim is to be creative, then, given particular features of her psychology, she may be *rationally required* to stop taking the drug and render herself irrational for periods.

These are cases where there is a choice about whether to induce or to eliminate abnormal states in oneself. But what of cases before the invention of drugs to treat bipolarity, where a bipolar creative person could not choose to treat his condition? Could Blake be rational in his irra-

tionality? Clearly he could not be so by virtue of *choosing* not to take the treatment, since no treatment was available. But he could be rational by virtue of *recognizing* that his creativity depended in part on his irrational episodes and being pleased that he was intermittently irrational.

Cases of rational irrationality fall into a broader class of rational strategies to promote creativity. Creative actions and discoveries sometimes depend on luck: a famous example is Alexander Fleming's discovery of penicillin from observation of a bacterial culture on which the mold *penicillium* had grown. Such cases are, however, not ones of *pure* luck: they require someone to spot the significance for his project of the lucky event. Since one cannot induce such lucky events, a good strategy to promote serendipitous discoveries is to be *open* to the possibilities that one's environment throws up. Someone who is open in this sense need not be actively looking for things that are useful to her projects; she may simply be alive to the possibility that she may come across such things and be willing, if she does so, to pursue the opportunities they throw up. In his Preface to *The Spoils of Poynton*, Henry James explains how he got what he calls the "germ" of the story from a conversation at dinner and remarks that most of his stories sprang from such germs; so James seems to have had a strategy of openness to environmental luck.⁴²

The strategy of openness can also be applied to one's mental life: free associations of ideas may lead one to new insights, and openness to such mental processes is a good strategy for generating new ideas. The Surrealist technique of automatic writing, which consists in trying to remove conscious control from the writing process, was an attempt to employ free associations for creative purposes. And A. E. Housman used to go for long walks after lunch, having imbibed a beer, which he describes as a "sedative to the brain"; he would regularly have lines or entire stanzas of poems come to him while he was thinking of nothing in particular.⁴³ These examples are not ones where one is using irrational processes: free association is not irrational, but is *nonrational* in the sense explained earlier, for there is no ground for rational appraisal or criticism of this flow of associations and ideas.⁴⁴ The strategy of rational irrationality, then, falls into a wider class of rational strategies of openness to one's environment and one's mental

life: it requires being open to the possibility that one's *irrational* mental states can promote one's creativity, and one may even actively pursue steps to induce them in oneself.

Not all instances of irrationality that figure in creative activities are ones of rational irrationality. Consider weakness of will. Suppose that Sylvia, a successful poet who suffers from manic depression, is offered lithium treatment. She believes, correctly, that taking the lithium would remove her impetus to write poetry. But she decides after careful reflection that her poetry is not worth it: she would rather be free of her crushing depressions than to continue as a poet. She has, however, always feared medical treatments, and, though she resolves to take her medicine, she backs down. So she continues to write poetry, while sincerely regretting that she does not take her treatment. Sylvia suffers from weakness of will, and is creative only because of her weakness of will. Since she is weak willed, she is practically irrational, and she is creative *because* she is irrational. But she is not rationally irrational, for her overall considered judgment is that she should take the pills. She is irrational *simpliciter*.⁴⁵ So not all cases of irrationality that foster creativity are ones of rational irrationality. But a large and significant class of cases falls into this type.

ii. Product-Value Rationality. Sylvia is irrational in respect of exhibiting weakness of will. But if reasons come in a broad variety, it may be that appropriate sensitivity to a particular type of reasons is required to be creative. That is the claim that I now defend. According to Denis Dutton, drawing on the work of Thierry Lenain, ape paintings are not artworks, since a chimp does not have the relevant appreciation of artistic values, but rather are the product of the chimp's enjoyment of splashing paint around, of creating a mess. Many of these works are ones that the chimp's trainer has removed when the trainer judges the result to be artistically satisfactory; were the chimp left unsupervised, he would carry on brushing paint onto the paper until it became an unintelligible mess. (My wife, who is a teacher, tells me that this is true of some three- and four-year-old children too.) And if a chimp is interrupted while painting, he will not go back to look at the painting again. So the works are not art but are the product of the chimp's enjoyment in, to use Lenain's terms, "disruption" and "pseudo-artistic play."⁴⁶

This account of chimp art is controversial.⁴⁷ But, since I am interested in defending a modal claim, it is not the correctness of the account that matters but the fact that it is coherent and represents a possible state of affairs, and hence can function as a thought experiment. So let us treat it as such for present purposes. Now, suppose that a particular chimp produces a canvas that is somewhat original and attractive: should we say that he is being creative in his painting? There is reason to deny this: if the chimp is interested only in disrupting his environment and lacks the capacity to grasp the artistic merits of the canvas, the fact that he produced an artistically satisfactory result is a matter of luck. This is even clearer in the cases where the trainer removed the canvas at the crucial point, since these depend on *the trainer's* artistic discrimination; and so from the chimp's point of view, it was luck that resulted in an original and valuable canvas.

In describing someone as creative, we accord her a kind of credit for her activities, and we do not give credit for mere luck. Luck can, of course, play an important part in creativity, as in Fleming's chance discovery of penicillin. But such cases are ones where someone *uses* luck in being creative. This is not the situation with the chimp: luck intervenes, but the chimp does not exploit luck in his painting.

The reason why the chimp's output is dependent on luck, despite his production of something original and valuable, is that he lacks the capacity to evaluate his painting artistically, and so artistic evaluations can play no role in guiding his painting activities. So, to be creative requires one to exercise an evaluative ability of the relevant kind. This constraint on creativity falls into a general class of conditions on the concept. It is not sufficient to be creative that one produces something original and valuable; for the production may be a matter of pure luck (such as when I spill a pot of paint and it happens to produce a beautiful canvas); or be obtained by means of exhaustive, mechanical search procedures, devoid of the exercise of understanding (as in some computerized methods of drug discovery); or merely by following precisely stated rules (as in painting by numbers). So to be creative, it matters not just *what* is produced, but also *how* it is produced.⁴⁸ Possessing an evaluative ability is one of the constraints on the manner of making something that is essential to its being creative.

There is an internal connection between this evaluative ability and a type of rationality. When a painter evaluates her work in making it, she judges what artistic value properties it has and what ones it should have in the light of her progress so far. So she takes the artistic *values*, actual and potential, of her painting as *reasons* to form it one way rather than another. These reasons are grounded on the actual and potential values of her painting: call these *product-value reasons*. We have seen that rationality consists in appropriate sensitivity to reasons. So in evaluating her work in making it, the painter exhibits a kind of rationality: call this *product-value rationality*; that is, she shows sensitivity to reasons grounded on the value of the product.

So another way to put the claim that creativity requires an evaluative ability is to say that creativity requires product-value rationality: a sensitivity to reasons grounded on the value of the product. Hence, there is a type of rationality that is required to be creative. In the case of the painter these product-value reasons are artistic ones, but the reasons vary with the type of creative activity: for instance, in the case of scientific creativity, scientific reasons are the relevant product-value ones.

The possession of product-value rationality is fully compatible with being irrational in other respects. Sylvia is irrational in not taking her medicine because she fails to do what she judges it is all-things-considered best to do, so she is irrational in respect of being weak willed. But since she is creative, she must still be sensitive to artistic reasons, and therefore is product-value rational.⁴⁹

A creative person must exhibit product-value rationality, and so must be rational in some respect. But there is no requirement that a creative person be irrational in any respect. There is no tenable a priori argument for that claim; and it is in tension with the empirical evidence. Ludwig notes that eighty-seven percent of the eminent poets he studied suffered from mental health problems, so that leaves thirteen percent who did not, and poets, as we saw, are the most prone to mental illness of all creative professions. So there is a *modal asymmetry* between the role of rationality and irrationality in creativity: whereas possession of a particular kind of rationality is required to be creative, there is no similar requirement that the creative person be *irrational* in any respect. Very many creative people, even in the arts, are ratio-

nal all the time in their creative activities. Thus, though the account of creativity I have offered is composite, in drawing on elements of the irrationalist tradition, its fundamental character is rationalist.

V. CONCLUSION

I have argued for a rationalist-composite account of creativity that has the following features:

1. *Modal asymmetry*: creative activity requires the exercise of a particular rational capacity (product-value rationality), but it does not require the exercise of an irrational capacity.
2. *Rational irrationality*: many, though not all, apparent instances of simple irrationality in being creative are really instances of being rationally irrational.

From the first claim, it follows that the account is fundamentally rationalist in character. From the second, it follows that those cases of creativity, where one is simply irrational in some respect, are less common than the evidence appears to suggest. But even when one is rationally irrational, one still is irrational in some respect, though one has rationally made oneself so; and some cases of creativity, as in the weakness of will example, may be ones of simple irrationality in some respect. So the account defended draws on both the rationalist and irrationalist traditions but is in a fundamental way rationalist. The rationalist needs to adapt her account to incorporate the psychological evidence but can do so without changing the account's fundamental rationalist character.⁵⁰

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1. Arthur Rimbaud, *Illuminations and Other Prose Poems*, trans. Louise Varèse (New York: New Directions, 1957), p. xxx.

2. Plato, *Phaedrus*, 245a, in *The Collected Dialogues*, eds. Edith Hamilton and Huntington Cairns (Princeton University Press, 1961).

3. Plato, *Phaedrus*, 248d–e.
4. Penelope Murray, “Poetic Genius and Its Classical Origins,” in *Genius: The History of an Idea*, ed. Penelope Murray (Oxford: Blackwell, 1989), p. 18. For an overview of Plato on creativity, see Elizabeth Asmis, “Plato on Poetic Creativity,” in *The Cambridge Companion to Plato*, ed. Richard Kraut (Cambridge University Press, 1992).
5. John Dryden, *Absalom and Achitophel*, lines 163–164, in his *Selected Poems*, eds. Steven N. Zwicker and David Bywaters (London: Penguin, 2001), p. 118; and Kay Redfield Jamison, *Touched with Fire: Manic-Depressive Illness and the Artistic Temperament* (New York: Free Press, 1993), p. 2.
6. Arthur Schopenhauer, *The World as Will and Representation*, vols. I and II, trans. E. F. J. Payne (New York: Dover, 1969). The quotation is from vol. I, p. 190. Schopenhauer discusses genius and madness in vol. I, pp. 184–194, and vol. II, pp. 376–402.
7. Friedrich Nietzsche, *The Birth of Tragedy and the Case of Wagner*, trans. Walter Kaufmann (New York: Random House, 1967), sections 12 and 13.
8. Nietzsche, *The Birth of Tragedy and the Case of Wagner*, p. 88.
9. Plato, *Gorgias*, 449d5–450c11, in *The Collected Dialogues*, eds. Hamilton and Cairns, gives painting, music, and sculpture as examples of crafts, though at 501e1–502a8 he excludes some types of musical performance from being crafts.
10. Plato, *Timaeus*, 27d4–30c1, in *The Collected Dialogues*, eds. Hamilton and Cairns.
11. Sir David Ross, *Aristotle*, 6th ed. (London: Routledge, 1995), p. 11. Psychologists falsely attributing this view to Aristotle include Jamison, *Touched with Fire*, p. 51; Robert W. Weisberg, *Creativity: Understanding Innovation in Problem Solving, Science, Invention, and the Arts* (Hoboken, NJ: Wiley, 2006), p. 91; and Albert Rothenberg, *Creativity and Madness: New Findings and Old Stereotypes* (Johns Hopkins University Press, 1990), p. 149.
12. Aristotle, *Poetics*, chap. 17, 1455a32–34, in *The Complete Works of Aristotle: The Revised Oxford Translation*, vol. II, ed. Jonathan Barnes (Princeton University Press, 1984).
13. Stephen Halliwell, *The Poetics of Aristotle: Translation and Commentary* (London: Duckworth, 1987), pp. 50 and 145–148; and D. W. Lucas, *Aristotle: Poetics* (Oxford University Press, 1968), pp. 177–179.
14. For an overview, see Milton C. Nahm, *Genius and Creativity: An Essay in the History of Ideas* (New York: Harper, 1965).
15. Charles Lamb, “Sanity of True Genius,” in his *Elia and the Last Essays of Elia*, ed. E. V. Lucas (London: Methuen, 1912), p. 212.
16. Jon Elster, *Ulysses Unbound: Studies in Rationality, Precommitment, and Constraints* (Cambridge University Press, 2000), especially part III.
17. Jerrold Levinson, “Elster on Artistic Creativity,” in *The Creation of Art: New Essays in Philosophical Aesthetics*, eds. Berys Gaut and Paisley Livingston (Cambridge University Press, 2003), especially p. 238.
18. A different objection to the rational making approach is that the creative process cannot be teleological. For a reply to this objection, see my “Creativity and Skill,” in *The Idea of Creativity*, eds. Michael Krausz, Denis Dutton, and Karen Bardsley (Leiden: Brill, 2009).
19. Plato, *Ion*, 535d–e, in *The Collected Dialogues*, eds. Hamilton and Cairns.
20. See my *Art, Emotion and Ethics* (Oxford University Press, 2007), chapter 9, for a defense of the rationality of emotions toward fictional situations. See also Tamar Szabó Gendler and Karson Kovakovich, “Genuine Rational Fictional Emotions,” in *Contemporary Debates in Aesthetics and the Philosophy of Art*, ed. Matthew Kieran (Malden, MA: Blackwell, 2006).
21. Henri Poincaré, “Mathematical Creation,” in *The Creative Process: Reflections on Invention in the Arts and Sciences*, ed. Brewster Ghiselin (University of California Press, 1985), p. 26.
22. Margaret A. Boden, *The Creative Mind: Myths and Mechanisms*, 2nd ed. (London: Routledge, 2004), p. 25.
23. Arguably, necessarily so: see Bernard Williams, “Deciding to Believe,” in his *Problems of the Self* (Cambridge University Press, 1973).
24. Jamison, *Touched with Fire*, chap. 3; and Nancy C. Andreasen, “Creativity and Mental Illness: Prevalence Rates in Writers and Their First-Degree Relatives,” *American Journal of Psychiatry* 144 (1987): 1288–1292.
25. Jamison, *Touched with Fire*, chap. 4.
26. Dennis K. Kinney, Ruth Richards, Patricia A. Lowing, Deborah LeBlanc, Morris E. Zimbalist, and Patricia Harlan, “Creativity in Offspring of Schizophrenic and Control Patients: An Adoption Study,” *Creativity Research Journal* 13 (2000–2001): 17–25.
27. Arnold Ludwig, *The Price of Greatness: Resolving the Creativity and Madness Controversy* (New York: Guilford Press, 1995), p. 149.
28. Ludwig, *The Price of Greatness*, p. 11.
29. Ludwig, *The Price of Greatness*, p. 8.
30. Weisberg, *Creativity*, pp. 380–385; R. Keith Sawyer, *Explaining Creativity: The Science of Human Innovation* (Oxford University Press, 2006), pp. 86–87; and Gary Becker, “The Association of Creativity and Psychopathology: Its Cultural–Historical Origins,” *Creativity Research Journal* 13 (2000–2001): 45–53.
31. Alternatively, it is sometimes alleged that researchers are influenced by their belief in the creativity–madness link to misattribute one of these traits to people: see Rothenberg, *Creativity and Madness*, p. 150, on Andreasen. However, several studies, including the Kinney study, use independent testing for creativity and mental illness.
32. Weisberg, *Creativity*, pp. 367–368.
33. Jamison, *Touched with Fire*, p. 95; and Ludwig, *The Price of Greatness*, p. 5.
34. Ludwig, *The Price of Greatness*, p. 147. The population estimate was made by the Epidemiological Catchment Area study, the largest of the population surveys that Ludwig discusses.
35. Ludwig, *The Price of Greatness*, chap. 9.
36. This is part of Ludwig’s explanation for the variation across domains; see especially his “Method and Madness in the Arts and Sciences,” *Creativity Research Journal* 11 (1998): 93–101. See also Weisberg, *Creativity*, pp. 378–379.

37. Quoted in G. E. Bentley, Jr., *The Stranger from Paradise: A Biography of William Blake* (Yale University Press, 2001), pp. 377–378.

38. Thomas C. Schelling, *The Strategy of Conflict* (Harvard University Press, 1960), p. 18.

39. Derek Parfit, *Reasons and Persons* (Oxford University Press, 1984), pp. 12–13.

40. Parfit, *Reasons and Persons*, p. 13.

41. Reported in Jamison, *Touched with Fire*, p. 245. People vary, though: seventy-seven percent of subjects in the studies found that lithium enhanced their productivity or did not affect it.

42. Henry James, “Preface to *The Spoils of Poynton*,” in *The Creative Process*, ed. Ghiselin, p. 151.

43. A. E. Housman, *The Name and Nature of Poetry*, in *The Creative Process*, ed. Ghiselin, pp. 90–91.

44. Ernst Kris, writing in the Freudian tradition, argues that artistic creativity involves regression in service of the ego, by which he means that the ego’s secondary (rational) processes use the more primitive (primary) processes of the id in the creative act. See Ernst Kris, *Psychoanalytic Explorations in Art* (New York: International Universities Press, 1953), especially chap. 3. The tenability of psychoanalytic accounts is widely disputed by psychologists, but it is worth noting that Kris’s account has the same basic structure as that which I have identified, since a rational process employs a different kind of process (though, given the role of imagination in primary processes, I would argue that primary processes should count as nonrational, rather than irrational).

45. To say that Sylvia is irrational *simpliciter* (or simply irrational, as I will also put it) is not to say that she is completely irrational or even overall irrational. Rather, being irrational *simpliciter* contrasts with the complex state of being rationally irrational. Sylvia is simply irrational in a certain respect, in being weak willed; but she can be rational in other respects. And, as I shall argue shortly, she must be rational in one particular respect if she is to be creative.

46. Quoted in Denis Dutton, *The Art Instinct: Beauty, Pleasure, and Human Evolution* (Oxford University Press, 2009), p. 7; Dutton draws on Thierry Lenain, *Monkey Painting* (London: Reaktion, 1997).

47. Lenain’s position is, in fact, more nuanced than Dutton’s brief discussion might suggest: for instance, Lenain thinks that apes, though they should not be credited with making art in anything like the human sense, have an elementary aesthetic sensibility (Lenain, *Monkey Painting*, p. 177); and he discusses the chimp Congo, who would get annoyed if his painting were removed before he was finished with it (p. 91). Lenain’s account has also been challenged: see Frans de Waal, *The Ape and the Sushi Master: Cultural Reflections by a Primatologist* (London: Penguin, 2001), chap. 4.

48. See my “Creativity and Imagination,” in *The Creation of Art*, ed. Gaut and Livingston, especially pp. 149–151; and my “The Philosophy of Creativity,” *Philosophy Compass* 5 (2010): 1034–1046, especially pp. 1040–1041.

49. Product-value rationality must be exercised at some point in the creative process, but it need not be exercised at every point: for instance, free association requires one to set aside judgments of value, but product-value rationality in this sort of case is exercised at the later selection and editing phase. However, since product-value rationality is only one kind of rationality, one can exercise it continuously in the creative process, even when the process simultaneously involves elements that are irrational or nonrational in other respects.

50. This article is a revised version of the 2011 Wollheim Memorial Lecture, delivered on Friday, October 28, 2011, at the 69th Annual Meeting of the American Society for Aesthetics. I owe my interest in creativity in part to the writings of Richard Wollheim, who pursued the question of how art is made—and relatedly the question of creativity in art—throughout his long career. There is also a more specific reason for the coupling of Wollheim and creativity in my mind. Paisley Livingston and I organized a conference in 2000 called “The Creation of Art,” which was intended in part to explore themes in Wollheim’s work and which he attended. It was in writing a paper for that conference that I first began to think about creativity. Versions of this article were also delivered at the “Touched: Philosophy Meets Art” conference in Liverpool, at New York University, Edinburgh University, and the University of St. Andrews. I am grateful to audiences at all these occasions for their helpful comments on the article.