Which Is More Productive, Writing in Binge Patterns of Creative Illness or in Moderation?

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The author reviews traditional beliefs about creative illness and suggests that their endorsement of euphoric bingeing misleads writers. Productive creativity seems to occur more reliably with moderation of work duration and of emotions, not with the fatigue and ensuing depression of binge writing. The author compares binge writers to a matched sample of novice professors who wrote in brief, daily sessions and with generally mild emotions. Binge writers (a) accomplished far less writing overall, (b) got fewer editorial acceptances, (c) scored higher on the Beck Depression Inventory, and (d) listed fewer creative ideas for writing. These data suggest that creative illness, defined by its common emotional state for binge writers (i.e., hypomania and its rushed euphoria brought on by long, intense sessions of working—followed by depression), offers more problems (e.g., working in an emotional, rushed, fatiguing fashion) than magic. The example of Joseph Conrad supports these findings.

As a psychologist, I see common and problematic assumptions among many academic writers working for tenure. Their self-defeating beliefs form a backdrop for the discussion and demonstrations of their counterproductivity that follow here. The first difficulty with conventional belief is its presumption that the most successful and creative writers work the hardest and with the most suffering. The second is its implication that the best and brightest of writers must be born with a propensity for creative illness, one that usually takes the form of

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crippling dysphoria and mania. The third is its insinuation that the most original and esteemed writers necessarily work in great, long binges with euphoria and its inspiration—and afterward must pay the price of exhaustion. And fourth, custom has it that binges of writing offer special advantages, including loosened, brilliant thinking and rare opportunities for quick, efficient completions of overdue projects.

Why do I consider these assumptions as conventional? In my two decades of close work with hundreds of academicians as writers (e.g., Boice, 1994, 1995), those were the views offered most often and spontaneously by my colleagues. When I asked for a rationale behind these beliefs, the usual answer was "every one knows that." And why do I wonder whether traditional notions of how best to work as a writer merit reexamination? Because, in my observations, the writers who work most deliberately to associate creative illness (which I define as the aftereffect of bingeing at creative work) also incur the most problems and disappointments as writers.

I begin the rest of my argument with a look at the little-known and sparse literature on creative illness that helps legitimize this widely held premise. The belief is far more substantial than its documentation.

TRADITIONAL NOTIONS OF CREATIVE ILLNESS

Creative illness, as usually defined by scholarly experts, poses a dilemma. On one hand, it implies that the best sorts of creativity come only to a gifted few. On the other, it suggests that true creativity exacts (or depends on) a price of painful, sometimes fatal, insanity. Still, writers themselves have asked few hard questions about whether creative productivity really needs to be so exclusive and expensive. If they did, queries like the following two might arise: Can creativity be facilitated in people who are not mad? Would the induction of creative productivity bring suffering that repays the outcome? The posing of those two questions suggests a third.

Why is creative illness so generally beloved but unexamined? Traditional beliefs in creative madness lend creative productivity a delightfully mystical air, one redolent with strangeness and derangement. We already know it in, say, Coleridge's "Kubla Kahn" in which the poet is pictured as someone to beware for his "flashing eyes and floating hair." In this orthodox view of how brilliant writers work, disorganization, depression, and disarray are deemed desirable; de-

mands for moderation and planfulness are disparaged (Bond & Feather, 1988). The resulting "creativity" in writing, which is usually left vague and undefined, is cherished for the eccentricity and inefficiency that supposedly distinguished its production from more ordinary activities.

The message implicit in convictions about creative illness is significant as it acts covertly to keep us from taking seriously the working problems of writers and other creatives (those problems commonly include anxiety, depression, blocking, failed careers, and even suicidality). It does this by implying that healthy efficaciousness and sanity (the opposite of dysphoria and anxious inhibition) actually get in the way of creative productivity. In the romantic view, creativity depends on excess and disorder; presumably, a well-organized and sane mode of working at writing would undermine brilliance. So it is, seemingly, that we cannot teach or facilitate the creative productivity of writers in systematic, rational ways. So it is, presumably, that only a minority of us, perhaps those with the right genes or Muses, are already doomed to write well or not.

To an extent, creative artists themselves contribute to the image that their success depends on lunacy and chaos. Writers, for instance, often delight in portraying writing as maddening (Didion, 1981), themselves as unsociable (Theroux, 1980), each other as embittered and psychotic (Ellenberger, 1970), and ideal writing conditions as requiring messy desks and hectic schedules (Kellogg, 1994). They like to elaborate the grief necessary to creative achievement—much of it, on closer examination, sounding like nothing more than dysphoria, procrastination, and blocking. The novelist Joseph Conrad, for instance, bemoaned the difficulty of his writing to anyone who would listen: At times, he was so distracted, discouraged, and blocked that he wrote only a line per day over several successive days (Meyers, 1991). Eventually, Conrad's misery as an author took a heavy toll in mental and physical problems. But Conrad, like many famous artists, supposed this the price of creativity.

That curious image—of creative productivity as necessarily and admirably unhealthy—persists for a variety of reasons. In this article, I focus on two.

One I hinted at just above: The conservative, undemocratic message of creative illness fits all too nicely with traditional, elitist views of creativity. It discourages the realization that creative productivity managed well is at least as much a matter of moderate, efficient work habits as of esoteric illnesses and pain. It suppresses information that

creative productivity in writing (defined here in terms of novel ideas for writing and a ready, original fluency) can be managed by almost any professorial writer—perhaps even those of us undistinguished in terms of familial eccentricity, socioeconomic status, and enigmatic infirmity.

The second focus follows from the first: I will try to show that creative illness stems from *not* knowing how to work efficaciously. And that creative madness, carried to extremes, is a self-defeating style of writing that unnecessarily risks strong and dangerous forms of mania and depression. True, creatives often find success in spite of the excessive emotions and distractions they generate. But they could, I argue here, work even more productively and creatively in the long run with the efficiencies of moderation. Instead of needing bingeing to work their way out of depressions that result from bingeing, they could simply learn to avoid disabling depressions.

To help develop both these points, I move next to a brief historical perspective.

Roots of Customary Beliefs About Creative Illness

Concerns about unhealthiness in creative productivity date at least to automatic writers who worked in marathons and to Surrealists who immersed themselves in long, spontaneous bouts of euphoric work (Boice & Myers, 1986; Gardiner, 1908). Both groups eventually experienced distress, depression, and suicidal tendencies. A tacit conclusion of these old accounts was that creativity, if carried beyond the mundane, comes at the price of madness. Simonton (1994) recounts famous instances of the pathologies that accompanied the intense energy of creatives: Beethoven's appearance before an audience with distorted features and confused utterances, looking as if he had just emerged from mortal combat with his enemies, the contrapuntists; Schumann's evident dependence on manic episodes for his prolific output; Mozart's offbeat, almost bizarre verbal associations; and so on.

Creative madness was first given scholarly credibility in Lombroso's (1891) criminological classic *The Man of Genius*, in which he concluded that greatness required an inferior genetic disposition to insanity and inventiveness. Academic luminaries including James (1902) soon joined the chorus of those who claimed that genius equaled borderline insanity plus superior intellect. Perhaps the most compelling arguments for creative madness appeared in personality studies. Distinguished creators scored higher than average on the

Minnesota Multiphasic Personality Inventory (MMPI) in dimensions of psychopathic deviation, schizophrenia, and depression, among others (Faust, 1984). Successful artists tested higher on the Psychoticism scale of the Eysenck Personality Questionnaire (Rushton, 1990). Notice, though, that although personality studies suggest a connection between psychopathology and creativity, they do not prove the causation its finders like to imply (i.e., that creativity is actually facilitated by madness).

Nowhere, except in the shunned and now forgotten psychologies of work, did anyone question the traditionalists (Rabinbach, 1990). Pierre Janet, the early psychotherapist whose insights often anticipated Freud, was one of those exceptions, and he, for example, concluded that mania from long, unsupervised bouts of "automatic" and euphoric work led to symptoms of madness (Ellenberger, 1970). In his nonromantic, objectivist view, the stress and strain that come with extended sessions of unrelenting, tense, and narrowed work can only interfere with creative productivity in the long run.

Why, again, do romantic views of creative madness remain more popular than the objective kind? All of us imprinted on presumptions of creativity owing to Muses; we take for granted old notions about the inspirations of oracles and other magical sources that await our entry into trance states resembling madness (Jaynes, 1976). We take special pleasure in pointing out that some of our most creative patriarchs such as Freud suffered from well-known periods of illness including depression that approached psychosis and seemed to presage their special genius (Ellenberger, 1970). These long-standing beliefs in the seeming dependence of creative productivity on madness will be hard to alter.

Indeed, the recent interest in creativity and madness perpetuates traditional assumptions but with somewhat different terminology. Proponents of creative illness now emphasize mood disorders (depression and mania) as afflictions of successful writers and other innovative sorts. This is the general argument: Manic-depressiveness occurs at uncommonly high rates among productive and successful writers; therefore, creativity somehow banks on this affective disorder. Holden (1987), for example, lists well-known writers, especially poets, who displayed unmistakable signs of manic-depressiveness (e.g., Lowell and Jarrell) and who committed suicide (e.g., Plath and Sexton). (Note, in all this, that definitions of creative illness remain somewhat loose and that correlations between manic-depressiveness and creative productivity are assumed equivalent to causation. No-

where in these discussions is there direct observation of writers benefiting from psychopathological styles of thinking or emoting. Note, too, that mere productivity and success are equated with creativity. I return to these problems anon.)

There could, I contend here, be another, more objective explanation for creative productivity than the mysterious processes of creative illness. Consider, first of all, that in traditional, largely anecdotal accounts, we have trouble knowing how selective the samples of creatives are. Exponents of creative madness generally do not draw out comparable numbers for maladies in other stressful, oft-criticized kinds of work. If, for instance, public officials proved just as depressive and suicidal as writers, we might be more inclined to attribute the costs of both careers to difficult working conditions including frequent exposures to rejection.

Recent Explanations of Creative Illness

The acknowledged expert on creative illness nowadays is Kay Jamison. She works in psychiatric/medical settings, writes with authority on affective illnesses, and offers the most systematic of scholarly accounts (Jamison, 1993). Yet, her presentation of creative illness is traditional and, so, has its romantic side:

> That impassioned moods, shattered reason, and the artistic temperament can be welded into a "fine madness" remains a fiercely controversial belief. (p. 3)
>
> Who would *not* want an illness that has among its symptoms elevated and expansive mood, inflated self-esteem, abundance of energy, less need for sleep, intensified sexuality . . . and sharpened unusually creative thinking and increased productivity? (p. 103)

Specifically, Jamison supposes that the cycle of mania and depression, as it moves from its fiery side to its judgmental side, results in creative productivity of singular, magical power. Manic-depressiveness, in her view, carries the divine (or at least biologically implanted) gift of "multiple selves." The evidence for her view is circumstantial, and her explanations are rather one-sided.

Consider the data Jamison (1993) calls up to support her enthusiastically received claims. She cites the studies of others such as Ludwig's (1992) computation that 18% of poets reviewed in *The New York Times* had committed suicide and that of all writers so mentioned, the

rate of hospitalization was 6 to 7 times that of nonartists. She pays special homage to the pioneering studies of Andreasen (1987), the first investigator who used modern psychiatric diagnostic criteria to determine the relationship between mental illness and creativity (e.g., of her 15 creative writers, 80% reported treatment for mood disorders; 43%, some degree of manic-depression). Better yet are Jamison's own connections drawn between madness and creative productivity: Of 47 eminent, award-winning British writers and artists, 38% reported treatment for mood disorder, most for poets and playwrights. One third of those recalled histories of severe mood swings cyclothymic in nature; one fourth, with extended elation; nine tenths, with intense, highly creative and productive episodes; and one half, with sharp increases in manic mood just prior to an intensely creative disposition. (Note, again, that creativity is still essentially equated to productivity and esteem. There are still few accepted indices of creativity per se, and, so, creativity continues to be inferred and not proven.)

Add to the relationships listed above another one: Manic-depressive disorders are most common among the professional or upper classes (Jamison, 1993), the very locus of productive genius reserved by tradition (see Simonton, 1994, for a more egalitarian view).

Why Do Customary Accounts Glamorize Unhealthy, Self-Defeating Ways of Creating?

And why does its literature champion this romantic view (e.g., Kohn, 1988) to the near exclusion of a more balanced picture? One answer is that there are payoffs in amiably excusing artists their eccentricities and foibles, especially in the domain of creative productivity. Notions of creative madness seemingly explain why so much important work comes at the expense of suffering and wasted effort. And, thus, these socially acceptable interpretations save us from having to excuse what could otherwise be embarrassing failings of writers: Bouts of depression, procrastination, and blocking (see Boice, 1996; Snyder & Higgins, 1988). What gets overlooked is that these affective disorders can also be the reliable outcomes of chronic bingeing and procrastinating—just as Pierre Janet might have predicted (Boice, 1994, 1996).

Something else helps perpetuate the romantic stance—a general glamorization of blocking by literary experts. Leader (1991) supposes blocks can be suffered only by already proven, talented creatives; those of us less gifted have no need of (or gift for) such maladies. And

Leader defines writing blocks in terms that discourage closer examination: As somewhat like Twain's metaphor of the "tank running dry," as different from Keat's "delicious diligent indolence," and as akin to the misery of silence.

AN OBJECTIVE REEXAMINATION OF CREATIVE MADNESS

Rothenberg (1990) is one of the few in this field to point out the methodological shortcomings of traditional research on creative illness. Andreasen (1987), for example, was the sole interviewer and diagnostician of the writers in her study, all of them from the Iowa Writers Workshop. Moreover, her definition of creativity was membership in that workshop. In her study and in Jamison's (1993), the only criteria for affective illness were subjects' own reports of treatment (and those reports also came from people in a work setting in which creative madness is apparently prized). Rothenberg reminds us of a related set of cautions: Writers are better able to understand and share mental experiences than are other people. Eminent people may enjoy exaggerating their own aberrations, particularly those that suggest the baffling qualities we associate with genius (Ochse, 1990). The rest of us, in recounting their brilliance, might like to imagine that their eccentricities (and not the work habits that might really make them different from us) are somehow germinal to their accomplishments.

An Alternative, More Parsimonious Explanation

We could more economically attribute creative productivity to learned skills like persistence and industriousness (although the doing may not prove popular with traditionalists). Charles Dickens, for example, often wrote amid weariness and discouragement; he found special genius while working to help dispel these and other moods that might have discouraged individuals with less resilience (Ackroyd, 1990). We could also look a bit harder than we usually do to find suggestions of the prices that creative madness can exact. Dickens, again, often binged, writing late into the night. The resulting tension could not be dissipated in the legendary 25-mile walks he took after writing sessions; he was often left with physical illness, depression, and blocking on the day or two afterward.

Other Generally Unappreciated Problems in the Tradition of Amiable Explanations

For one thing, customary notions of creative madness ignore the conclusions of established creativity researchers. Barron (1963), in his book *Creativity and Psychological Health,* found qualities such as independence of judgment and ability to rally from setback related to creativity. In a recollection of writing that classic book, Barron (1986) disagreed with romantic notions that creativity depends solely on erratic mental health, arguing that "the creative person is at once both naive and knowledgeable, destructive and constructive, occasionally crazier yet adamantly saner. . . . More positively: Without knowledge, no creation; without stability, no flexibility; without discipline, no freedom" (p. 18).

Simonton (1994) offers another unusually balanced view: Although creative productivity seems to depend on "weirdness" (usually some mixture of psychoticism and mania), its level must be moderate enough to allow consistently productive work. The somewhat odd individuals who achieve greatness, many of them from families with members who show immoderate degrees of mental illness, are at risk of becoming unstable themselves when they lose their balance. What, then, could move them past the essential autonomy and perseverance that permit success and into the affective/cognitive extremes that undermine creative productivity? Immoderation. In my own two decades of experience coaching writers, academic and otherwise (Boice, 1994), the problem is a simple skill deficit of not knowing how to work with patience and tolerance. The resulting rushing, bingeing, and depression can push weirdness above the threshold for madness. Thereafter, creative productivity is delayed, even blocked.

To further clarify how inefficiencies of working can be central to creative madness, I take a closer look at its supposed benefactor.

Manic-Depressiveness

I have already suggested what a more balanced, objective view of creative work implies: Creative productivity, at least in the long run, is most likely if the work behind it is conducted in moderation. Without question, strong neurotic and affective symptoms are almost always maladaptive and counterproductive (Ochse, 1990). Mania and its ensuing depression are more so. Even a milder state of mania, hypomania (American Psychiatric Association, 1994), often disables

writers far more than it helps. Working under a state of extended hypomania (in marathon sessions) typically engendered rushed, unreflective, and unrevised work (Boice, 1989, 1992a, 1993). Soon after, as a rule, this bingeing led to periods with higher levels of self-reported depression. And, in the longer run, bingeing led to a markedly lowered output of written pages (Boice, 1994). The aftermath of excessive binges of writing (of the sort necessary to produce the symptoms of hypomania depicted above from Jamison, 1993) went beyond diminished productivity in the longer run—to behavioral signs of fatigue, insomnia, misery, social strife, and procrastinating/blocking. Eventually, the sort of affective cycle glamorized by champions of creative madness led to less quality and creativity (as rated by writers themselves and by independent judges) and to less editorial acceptance of writing compared with writers who worked with generally mild emotions and brief sessions (Boice, 1993).

To expand on these observations about hypomania, I conducted a systematic study of binge writing, creativity, and madness to show how euphoric hypomania actually affects the productivity and creativity of scholarly writers.

METHOD

Subjects

From a much larger project in which I tracked writers new to academic careers on campuses that required writing and publishing for tenure (i.e., Boice, 1992b), I selected 16 volunteers for participation in this year-long study. All were from departments in the humanities, social sciences, or hard sciences; all had materials for writing at hand and expressed intentions to write mostly for scholarly journals. All the writing I observed them doing was of the scholarly sort intended for publication (i.e., not memos or letters).

Eight of the new hires had established clear records (in my weekly observations of them at scheduled writing times during their first year on campus) as romantic proponents of creative madness. When they wrote, they almost always worked in binges with few breaks and with a hurried pace—a gait that they reported, in ongoing fashion to me, as highly euphoric and essential to their best, most brilliant writing.

The second group of eight new faculty were also in their second year on campus, but they had evidenced a regular habit of writing in the first year with only occasional reports of bingeing or of strong, sustained euphoria as writers. (In the majority of work weeks, they evidenced writing sessions on at least 3 days.) These regular writers, unlike members of the first group, rarely talked of needing Muses, inspiration, or heated emotions to write. They never openly aspired to brilliance or creativity in their writing, at least in the present. Instead, they expressed what seemed to be mild happiness with their relatively brief but regular sessions of writing.

Data Collection

All 16 writers agreed to spend their second year on campus as participants subjected to even closer scrutiny as writers. I continued to visit them during a scheduled writing time each week, as in Year 1. But in Year 2, my visits to their offices were longer (typically 30 to 60 minutes, often with revisits later in the same day) and more detailed; during these interactions, I worked quietly at projects of my own, but I periodically recorded their rate of pacing (stopped, slow, medium, fast), rate of pausing for periods of a minute or more, number of errors (indicated in keyboarding patterns and in erasures or cross-outs during hand writing), and spontaneous comments about their writing experiences. (I acknowledge the possibility that my presence may have altered the performance of writers—despite the strong and spontaneous claims of participants that they soon ignored me.) I also made unannounced visits and phone calls to writing sites once a week per writer. To check for the reliability of my observations, I had a graduate student (who was blind to the purposes of my measures) make independent recordings in at least one of every eight of my meetings with subjects. Agreement on these easily seen and heard behaviors of writers was virtually perfect (96%), with differences nearly exclusive to distinctions between slow and stopped rates of writing.

Data Analysis

I relied on four somewhat interrelated indices to distinguish the costs and benefits displayed and reported by the two groups—binge

writers versus regular writers. (Because I knew of no prior methods for measuring bingeing at writing, emotion expressed while writing, or the depression that might follow, I relied on related measures already in use elsewhere. I had no particular theoretical approach in mind.)

Behavioral symptoms of hypomania during writing times. These symptoms included (a) fast, rushed rates of writing without pausing for periods of 15 minutes or more; (b) fatigue reflected in error rates of more than three per minute over 5 consecutive minutes; (c) working at writing, during more than two thirds of the session, in hurried fashion and without obvious reliance on outlines, notes, or prior prose; (d) spontaneous comments indicating euphoria while writing (e.g., "I'm on a high now like the first glow of a love experience; I wouldn't stop if you held a gun to my head").

The Beck Depression Inventory (BDI). The BDI (Beck & Steer, 1987; Volk, Pace, & Parchman, 1993) is a brief (5 minutes), standard questionnaire with items like "I feel sad," " I am disgusted with myself," and "I have to push myself very hard to do anything." I administered the BDI at the following intervals: (a) just prior to two consecutive daily sessions of writing, (b) just after the end of the second session, (c) 1 day after the second daily session, and (d) 2 days after. The BDI was used as the primary index of depression levels experienced by writers.

In every instance in which such measures were taken, individual participants spontaneously adhered to their usual writing habits. Members of the binge group wrote with no more than one significant interruption or pause (but otherwise with a chronically fast pace) for at least 2 hours, usually far longer (range = 2 to 12 hours). Regular writers generally wrote for no more than 1 hour each day (and with a dominance of moderate pacing plus at least four pauses for reflection/relaxation), rarely for more than 90 minutes.

I sorted BDI scores into standard categories with slightly raised cutoff points to minimize false positives (i.e., 0-10 = minimal; 10-18 = mild; 19-32 = moderately depressed). The BDI is sensitive to conventional aspects of depression such as pessimism and self-dislike as well as their kindred characteristics of work inhibition and fatigue (Vol et al., 1993).

To ensure some comparability of BDI measures taken from these two groups, I limited the tests to the first two instances of writing in both semesters that met the criteria just listed. This method, carried out over two successive semesters, produced a total of four such

observations per participant, almost always at times following vacations when these new faculty felt compelled to resume writing.

Writing productivity over Year 2. Writing productivity in the second year was measured by (a) pages of new prose (or of prewriting that led to it) verified each week; (b) records (based in part on participants' self-reports) of binges per month (with a criterion of at least 90 minutes writing without significant pause and with consistently high rates of working); (c) records of brief, daily sessions per month (no more than 120 minutes per day/session, a dominance of moderate pacing, and one pause per 20 minutes); and (d) number of manuscripts accepted for publication in a refereed outlet, verified by editorial letter and by the participants' tenure committees as likely to meet departmental standards.

Creative ideas for writing. Although I relied on ready fluency and editorial acceptance as the basic measures of creative productivity in this study (much as traditional proponents of creative illness madness have), I collected another index of creative thinking. A case can be made for the validity of compiling creators' reports of their own, ongoing thoughts of innovative, useful ideas for writing as an index of creativity; apparently, such a measure is more useful than are typical systems of estimating creativity (Boice, 1983). So, here, I asked writers to keep a log of their "creative ideas for writing" as they wrote. During my weekly visits and calls, I had writers restate and explain these entries for me, and I counted only those that I judged as original (for that writer) and as potentially useful in her or his writing project. Here, too, I had a second observer score these lists independently; agreement was moderately strong at 86%.

Two Cautions

First, I agree with my critics that these are not perfect measures of creativity, of emotion experienced, or of hypomania; I merely tried to establish some reference points in a generally unexplored domain. Nor, in all likelihood, are my conditions for observing "madness" perfectly generalizable. Here, I deal with writers who worked, at most, with a modicum of madness, much of which did not evidence itself until the day or two after bingeing. To gain a more complete picture of how full-blown, suicidal levels of depression and impulsively dangerous states of mania affect creative productivity, we would need to entertain conditions (all of them unethical) well beyond these. In defense of these opening moves, I say this: They do represent

the usual, everyday conditions of creative madness for the hundreds of academic and professional writers I have studied over two decades—conditions that bring real costs to health and long-term output and success. Also, the amount of data collected and analyzed in terms of direct observations of real writers writing with important consequences has yet to be approximated in other examinations of creative illness.

A second general caution is that I have chosen here to represent two clearly distinctive groups (binge and regular writers) to make my point. Writers of more intermediate status, had I chosen to represent them here, would have shown intermediate results (e.g., writers given to occasional, moderate binges evidenced only middling increases in depression and tolerable decreases in output).

RESULTS

Figure 1 shows higher levels of hypomanic symptoms for binge writers than for regular writers. Bingers were reliably more often observed to

1. work intensely while rushing and without pausing, $t(14) = 19.31, p < .001$;
2. spontaneously report euphoria while writing, $t(14) = 10.88, p < .001$;
3. work impulsively without plans or external cues for writing, even if they had them at hand, $t(14) = 11.78, p < .001$; and
4. make mistakes in putting words on screen or paper that apparently interfered with their writing fluency, $t(14) = 15.51, p < .001$.

Figure 2 shows a similarly strong contrast in the general working styles and writing productivity of the two groups. Bingers (just as in Year 1 on campus) were far more likely to binge and almost completely unlikely to work in brief, daily sessions of writing (these data helped affirm my initial definition of them as a group), $t(14) = 13.46, p < .001$. Binge writers, despite their occasional outbursts of writing, produced a much lower average output of pages, one that fell well short of their projections for sufficient numbers to gain tenure, $t(14) = 13.46, p < .001$. And bingers were far less likely to finish and gain acceptance for their scholarly manuscripts during the year of intense observation, $t(14) = 2.81, p < .01$.

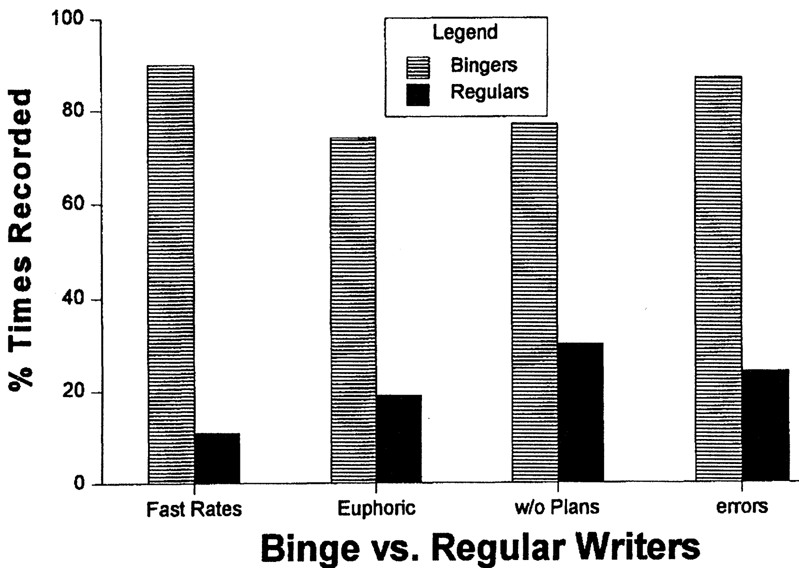

Figure 1. Four behavioral symptoms of hypomania (fast rates of writing; spontaneous reports of euphoria while writing; writing without obvious reliance on notes, outlines, or prior prose; and error rates indicative of writing until fatigue) compared for binge versus regular writers over Year 2

A few reasons suggest themselves as to why binge writers ended up showing so much less productivity than did regular writers: Bingers commonly produced no more pages per binge than did regular writers working in sessions a third as long. And bingers usually waited a week or more before resuming their writing. Also, bingers reported far more time wasted in "warming up" and in reacquainting themselves with the writing project than did writers who worked almost daily. Bingers more often described writing as grueling, as something they wanted to avoid (indeed, they far more often reported writing blocks that kept them from entering more than a few sentences during prolonged attempts to write). And bingers more commonly showed nonverbal signs of fatigue and depression when they talked about writing (e.g., "closed," slumping postures and sad facial expressions).

Figure 3 portrays the outcome of testing the two groups for self-reported levels of depression with the BDI; the graphed levels reflect

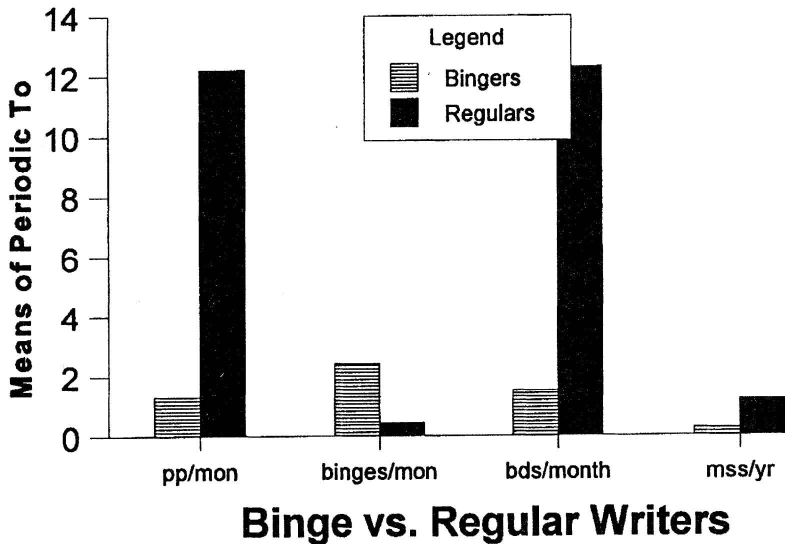

Figure 2. Work habits (binges per month [binges/mon] and brief, daily sessions per month [bds/month]) and writing productivity (pages per month [pp/mon] and manuscripts accepted per year [mss/yr]) contrasted for binge and regular writers as the mean values of periodic totals

only those participants who scored in the moderately depressed category or above for established standards on this index. Bingers scored as generally more depressed when dealing with writing in general. They more often scored as moderately or highly depressed just before a scheduled writing session, and they scored as moderately depressed or higher far more often the day or two after completing intense, exhausting binges. The exception to this pattern occurred just after bingers finished a second consecutive day of bingeing; buoyed at that time, apparently, by the lingering and diminishing mania and euphoria they still reported feeling, bingers scored more variably on the BDI than at other times, but no more highly overall than did regular writers.

Analysis of effect sizes provides a sense of the substantial differences between bingers and regulars on BDI scores. The variable of group accounted for 53% of the variance in the prewrite situation (standard error of estimate = 7.20) and, at its most extreme, for 85% of the variance at the 2-day-later point (standard error of estimate = 14.48).

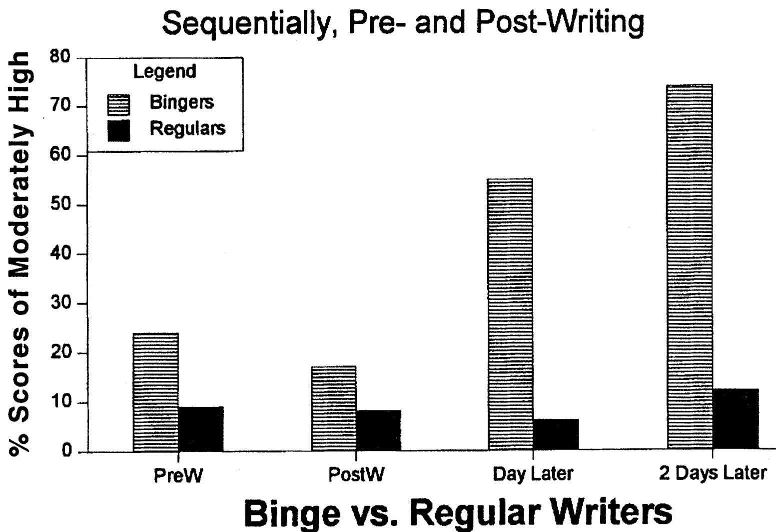

Figure 3. **Beck Depression Inventory (BDI) scores at moderately high and higher levels, compared between binge and regular writers on four occasions surrounding typical writing sessions: just prior to writing (PreW), just after completion of a second day of writing (PostW), 1 day later, and 2 days later**

Finally, regular writers fared much better than did binge writers at generating ideas judged as creative and useful for their ongoing writing (*Ms* = 7.3 vs. 1.6 listings per week), $t(14) = -9.0$, $p < .001$. Spontaneous comments by members of these two groups suggest a reason why. Regular writers commonly remarked that they thought about writing as a routine, enjoyable habit; so it was, they said, they often came to writing sessions with formative ideas about new connections already in mind. Bingers, in contrast, commonly reported that they avoided thinking about writing between sessions. And once writing, bingers less often reported pauses that included reflections of a creative sort (instead, they usually spent pauses expressing worries or euphoria).

Although these observations must be considered preliminary, the results indicate good cause for questioning traditional beliefs that extremes of madness (i.e., manic-depressiveness) are necessary for creative output and success. These results even suggest that creative madness (at least in its common form for writers—hypomania) can be inefficient in the long run.

EFFICACY VERSUS CREATIVE MADNESS: A LITERARY EXAMPLE

When I present data like those just above, I encounter doubts about their meaningfulness, even from objectivists. Skeptics suppose that although bingeing and mania might hinder the writing of the academic types I usually study, truly creative artists really do need (a) manic-depressiveness experienced at times in full-flower and (b) other kinds of seeming inefficiencies including procrastinating, blocking, and suffering to manage their best work.

But these doubters, in my experience, usually know little about how, say, famous novelists actually worked and how their work habits related to things like dysphoria and productivity. The best cases are historical accounts that show a writer working, at different times, with madness/blocking and efficacy/fluency. The result, at least in my reading, is always the same: Efficacy operates better than madness.

Consider the biography of Joseph Conrad (Meyers, 1991). Early in his career as a writer, including the period during which he established his lasting fame, Conrad wrote slowly, painfully; he procrastinated and blocked at writing. When he was stuck, which was often, he was afflicted with crippling neurasthenia that further prevented him from writing: "My nervous disorder tortures me, makes me wretched, and paralyses action, thought, everything! I ask myself why I exist. It is a frightful condition. Even in the intervals, when I am supposed to be well, I live in fear of the return of this tormenting malady" (quoted in Meyers, 1991, p. 119).

Although he always began his workdays at exactly the same time each morning, Conrad spent most days struggling to get started. As a rule, he did little or no writing until evening, and then he binge-wrote until late into the night. The usual result, even of bingeing, was slow and painstaking writing (sometimes no more than 300 words per day)—and utter exhaustion. His editors constantly chafed at his dilatoriness, and Conrad described his own experience as an exquisite agony, one that apparently required crisis and frenzy to complete his work.

In the middle stage of his career, Conrad was forced, more or less, into an efficacious style of working. His close friend, the novelist Ford Madox Ford, became a kind of benefactor, mentor, and amanuensis who provided remarkable support and structure for Conrad:

> Ford's literary help was even more significant [than renting him his house cheaply and advancing him money]. He listened as Conrad read aloud what he had written, suggesting words, phrases, and forgotten incidents. Ford proof-read and corrected Conrad's manuscripts. He even took dictation as Conrad talked what he would like to write. (Meyers, 1991, p. 182)

Ford not only offered good ideas but had the uncanny ability to stimulate Conrad to write when he would otherwise have been overcome by illness, exhaustion, and despair. In part, Ford did this by helping to structure Conrad's writing days with more planning and on-task work. The result was a remarkable increase in Conrad's productivity. He could, dictating to Ford, write a thousand or more words per day, and during this period, he made significant progress on *Nostromo* and finished *One Day More*. Ford's influence was so effective in inducing moderation that it eliminated most of the madness from Conrad's writing habits—with an apparent gain in his creative productivity.

Later, after he had a falling out with Ford (whose help he never really appreciated), Conrad resumed his old ways of slow, tormented, and maddened writing. His productivity lessened and so, according to his chroniclers (e.g., Meyers, 1991), did the quality of his writing. The creative struggle he experienced with *Under Western Eyes* was so intense that it led to Conrad's complete nervous breakdown:

> Conrad suffered recurring pain from chronic gout and the ever-present anxiety about money. He often started his novels without a clear plan and had no idea where the book would end—or when. . . . In the summer of 1909 Pinker [his publisher], dissatisfied with Conrad's failure to deliver the long-awaited manuscript, threatened to sever their business connection. In December they reached a crisis when Pinker refused to advance any more funds and Conrad [vowed] to throw the manuscript into the fire. (Meyers, 1991, p. 251)

Clearly, Conrad's old habit of working amid what might be called creative madness was more costly and less productive than his temporary diversion into efficacy. Not only did the madness hinder and then halt his work, but the strains it induced brought him misery and an early death.

Where, then, did Conrad receive his inspirations and remarkable prose style? Sometimes, during the interludes between depression and mania. More reliably, from sustained periods of patient and rational thinking. Most reliably, in the midst of reflecting his images and wordings off another creator who emphasized discipline in work.

DISCUSSION

The findings here contradict the romantics who champion creative illness. Binge writers (who told me they needed the euphoria of bingeing to do their best work) proved far less productive, creative, and successful as writers than did counterparts who worked in brief sessions and with moderate emotions. Indeed, bingers proved too unproductive to meet the expectations of their retention and tenure committees. Despite the delightful, euphoric highs they reported during their binges, bingers evidenced far more suffering connected to writing on a day-to-day basis. And, for all their pain as writers (accompanied by beliefs of its necessity), bingers were rated as less creative workers. They were less likely to find editorial acceptance for their work, even to manage long-term satisfaction by way of their accustomed habits and beliefs. Depression, not genius, was the most likely outcome of their writing habits.

I take these results to mean two things: First, the efficacy of moderation can work better for writers than madness, suffering, and disorder. Second, the madness associated with creativity is more a self-defeating artifact of inefficiency and immoderation than it is the magic generator of creativity. Why, then, do so many famous creatives work with the handicaps of depression-mania and other maladies? Perhaps because few of us are taught the efficiency of moderation in working at tasks like writing. Perhaps because writing, with its unusual potential for public embarrassment and rejection, exacerbates our self-defeating tendencies to rush about busily, doing other, less emotionally threatening things until we procrastinate and block (Baumeister & Scher, 1988; Baumeister, Heatherton, & Tice, 1994). Procrastination and blocking do, after all, incur bingeing and the added stresses of working under deadlines.

Although I do not assume that the kind of routine efficiency that underlies expertise (Ericsson & Charness, 1994) is the basis for all of creativity, I do conclude that it offers a more sound explanation than

the magic of mania and its ensuing depression. Specifically, I believe the results of this study suggest that moderation and regularity in work like writing are preferable to extremes of emotion. The excitement of hypomania may help to a point, as a temporary source of motivation and inspiration, but that remains to be proved. Depression, we know, increases realism, often to a fault; it is doubtful that depression during work sessions helps writers find fluency or creativity. Until there is proof to the contrary, we might better advise ourselves, our students, and our patients to rely less on hopes for magic and suffering and more on calm, regular habits of working in the long run.

Said another way, these results mean we may need to reexamine usual assumptions that simple, healthy, moderate modes of working hinder creative productivity, that excess and disorder foster brilliance, and that writing cannot (or should not) be taught in a rational, systematic fashion. This change could mean more likelihood of taking the problems of writers and other creatives seriously, perhaps of teaching the processes of creative productivity differently. In the simple, democratic view taken here, strong depression is avoidable and unnecessary in writing. Any reasonably educated person, I imagine, can write productively, creatively without it. With bingeing, depression operates in circular fashion, perhaps first as the horse in the famous cart-and-horse scenario (i.e., except when we are already depressed, depression is first the effect of bingeing and then a condition that could require more bingeing to move us past its immobility . . . unless we can be induced, probably by way of incentive and modeling, to assume the regular practice of moderations such as brief, daily sessions).

Compositionists and other writing coaches are in an ideal position to observe the effects of excessive emotion on writers writing; their oft-overlooked observations on this topic merit more attention and encouragement. Larson (1985), for example, noted that groups of students who were "overaroused" and those who were "underaroused" performed less well on a writing assignment than did students who worked with monitored and moderated emotion. That simple observation adds an important understanding about the mechanism of moderation: Neither strong nor weak emotion and pacing are as effective as a happy medium. Similarly, Brand (1989) found that the emotions of professional writers, especially negative kinds like anxiety, moderated over writing sessions. Unlike novice

writers, these experts showed more patience in moving to feelings of satisfaction with their work. Brand's conclusion argues against usual notions of creative illness: "Intermediate levels of emotional arousal yield high performance—in other words, the best written products" (p. 209).

Of course, compositionists have already shown occasional tendencies to objectify and simplify writing processes. Rose (1980), Daly (1985), and Hayes and Flower (1986) stand out as pioneers who demystified writing blocks as problems of poor work skills, maladaptive cognitions, and conditioned anxieties. Murray (1995) may have been the first in the field to emphasize simple and generally unmentioned disciplines for writers (e.g., "writers write"). And compositionists have often advocated moderation and discipline in the use of emotion. Some examples: Elbow's (1973) popularization of free writing as a moderated form of automatic writing, one with lessened emotions compared with the classic version; Brown's (1988) advocacy of proper eating habits and of physical exercise for writers, of daily writing times, of timely breaks and stretches during writing sessions, and of stopping writing sessions when diminishing returns set in; and, significantly, Lamott's (1994) promotion of moderate discipline (e.g., " 'Do it every day for a while,' my father kept saying. 'Do it as you would do scales on the piano. Do it by prearrangement with yourself' " [p. xxii]) as a means of managing one's writing and one's life with good humor. It is that last combination (of prescribing simple but broad life changes as the basis for finding productive creativity) that may signal a sea change toward efficiency and moderation (compared with creative madness) among compositionists.

The messages in this emerging literature, increasingly, are (a) about the moderation of pacing and emoting that come in the practice called mindfulness and (b) the generality of simple methods for moderation. Tremmel (1989, 1993) was one of the first compositionists to note the observable, practical benefits of this approach: Student writers in his classes produced more and better writing with moderations such as brief, daily sessions in working; student teachers in his practicums fared better with the reflective practice that comes from mindfulness and encourages teachers (or writers) to calmly attend to what they are doing (or not doing) in the moment.

Where does this trend seem to be heading? It could help reinforce the perception that both cognitive and affective constructs of writing are essential, something that leading modelers of the writing process now more commonly assume (e.g., Hayes, 1996). And it could stimu-

late a broader, more tolerant view of creativity, one that moves us away from rigidly traditional beliefs about creative illness. If we look closely, we can see the harbingers in popular books such Goldberg's (1994) Zen Buddhist approach to helping writers. She not only extends the calm attentiveness and self-discipline of meditation to writing (somewhat like the moderation discussed here), but she also supposes that understanding the processes of mindfulness can provide the missing link in our teaching of writing: "no one has been able to articulate the writing path, so it does not get passed on and each writer individually has to luck out and bump into it" (pp. 91-92). Assumptions that the best writing awaits mindfulness and its moderation are more democratic than notions of creative illness. Almost anyone, presumably, can learn moderation, even creative productivity. Mindfulness, after all, is little more than the regular practice of attentiveness and patience. It requires no special predisposition to madness, no membership in elite socioeconomic groups, no mysterious agents.

All this, particularly the move toward mindfulness, may sound a far cry from the behaviorist roots I demonstrated in the suppositions and research of this article. But, then, the Dali Lama himself draws the link this way: "Buddhism insists on phenomena that we can see, touch, and understand" (Lama & Carriere, 1996, p. 89).

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