CREATIVITY AND NON-LITERARY WRITING: THE IMPORTANCE OF PROBLEM FINDING

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Traditionally the label "creative writing" has been reserved for products of fiction writers, poets, and playwrights. Adjectives such as "imaginative," "original," "surprising," and "stimulating" are used to describe their works. I have no difficulty appreciating the talents of these writers and their literary contributions. Rather my concern is that when we turn our attention to other forms of writing—writing with expressive, referential, or persuasive aims, to use Kinneavy's labels—we tend to view them as requiring no creativity, and we readily apply different adjectives—"conventional," "ordinary," "formulaic," and "functional." As a result, these other kinds of writing may evoke less than the best efforts of composition teachers and their students.

Teachers and students alike may share this attitude toward non-literary writing if they believe in what Weisberg calls the "genius myth"—the romantic notion that only extraordinary tasks require creative thinking and that "creative achievements come about through great leaps of imagination which occur because creative individuals are capable of extraordinary thought processes" (1). Erato inspires poets, not student essayists. More recent theories of creativity, however, define it in ways that suggest possibilities for creativity in all writers and in all forms of writing. In this essay, I argue for expanded definitions of "creative writing" and the "creative writer" and show how recent theories of creativity with

an emphasis on problem finding can enhance composition pedagogy.

REDEFINING CREATIVE WRITING AND CREATIVE WRITERS

Let me begin with an operational definition of creativity. While there is no single agreed-upon definition, I have chosen one that incorporates the gist of several popular ones and illustrates a more modern view of the concept than the genius myth. Proposed by MacKinnon and colleagues at the Institute of Personality Assessment and Research at the University of California, Berkeley, in the early 1960s, it remains "a widely accepted and frequently cited" definition in the field of creativity studies (Harrington 145):

> . . . true creativeness fulfills at least three conditions. It involves a response or an idea that is novel or at the very least statistically infrequent. But novelty or originality of thought or action, while a necessary aspect of creativity, is not sufficient. If a response is to lay claim to being a part of the creative process, it must to some extent be adaptive to, or of, reality. It must serve to solve a problem, fit a situation, or accomplish some recognizable goal. And, thirdly, true creativeness involves a sustaining of the original insight, an evaluation and elaboration of it, a developing of it to the full. (485)

One feature of this definition is its applicability to "nearly any domain of organized human activity . . . including, but not restricted to, the arts, science, technology, business, and public affairs" (Harrington 146). Thus, by extension, creativity can be a property of any text that is original, adapts to a context and audience, and realizes its goal through written expression. Carey and Flower remind us that "creative responses to the rhetorical problems raised by school, professions, and public-life are necessary on a regular basis for these groups to sustain what others see as quality work." They call this kind of insight "practical creativity" (1).

Just as recent work has demystified creativity and broadened its definition, so too has the capacity of creative people been identified as more than a divine gift. Dacey in *Fundamentals of Creative Thinking* claims that creativity is "a cognitive, attitudinal, personal trait that *every* person has to some degree" (5). He bases his assertion on "the most succinct model of creativity available today,"

one proposed by Jackson and Messick which identifies four intellectual traits of the creative person.[1] First, creative people are tolerant of ambiguity and can "empathize with ideas that diverge from their own, and thus they are capable of combining their existing ideas with those that are new to them" (6). Second, creative people are both intuitive and analytic. Dacey explains that while "creativity is often linked to intuition, . . . high productivity almost never develops from the subconscious alone. The use of inductive and deductive logic typically plays a role in creating high-quality products. So does the careful checking of results against expectations. Analytic thinking may be seen to operate in the creative act in many ways" (8). Third, creative people are open to new ideas. They "perceive objects in their own right—independent of their symbolic representation, their stereotyped function, or their relatedness to the immediate needs of the viewer." Fourth, creative people are both spontaneous and reflective—"an alternate blending of working style, a cyclic pattern of patience and passion, . . . a continual shifting from total acceptance of one's ideas and actions to a critical rejection of them" (Jackson and Messick 326, 327). Clearly, these traits could enhance the performance of all writers, not just novelists, poets, and playwrights. Thus the report writer who takes an original, open-minded approach to his subject and applies his intuitive and analytical skills, working at times spontaneously and other times reflectively, could rightly be labeled a creative writer.

The definition of creativity proposed here and the characteristics of creative people are reflected in Tchudi's description of his writing process, particularly in his experience of the "Write Idea":

> There is a crucial moment in my composing process when I get what I call the Write Idea. This is more than just a 'good idea' for a piece of writing. It certainly involves more than simply responding to an 'assignment,' whether that assignment be writing an article for a book of essays or sending my department chair an evaluation of a program. In fact, a Write Idea extends beyond the limits of a flat sheet of paper and involves seeing connections between my past experience, the writing task at hand, and the impact of some writing on an audience, known or imagined . . . . Prior to the moment of the Write Idea, I may have a head or briefcase full of notes

and ideas, and I may have a pressing manuscript deadline, but I will not be able to write.

The arrival of a Write Idea often has elements of the 'Ah ha!' or 'Eureka!' experience for me. (272-73)

I cite Tchudi's account of his writing process because he uses it to compose academic texts as well as fiction. His explanation depicts a creative act, regardless of the type of writing. Tchudi contends, however, that "one cannot teach students how to generate Write Ideas, but the teacher can encourage the process" (275). What forms might such encouragement take? How can we help student writers realize their creative potentials and recognize opportunities for creativity in non-literary writing?

ENCOURAGING CREATIVITY THROUGH PROBLEM FINDING

In "Foundations for Creativity in the Writing Process," Carey and Flower investigate three processes which are crucial to completing writing tasks successfully:

1. constructing an elaborated and flexible representation of the task;
2. integrating topic knowledge and rhetorical knowledge; and
3. applying and controlling problem-solving strategies. (2)

The first process is a *re*-presentation of the task in a way that makes the assignment the writer's own. Although a teacher or boss may have assigned a general task—write a research paper or draw up a proposal—the writer must "take an active role in defining the boundaries of the problem and in specifying a set of goals and criteria for the task" (3). In the most demanding and creative writing tasks, this first process is one of problem finding, of formulating an original problem from a situation where no previously stated problem exists and no ready-made solution is evident. The second process is one of problem solving, planning ways to combine subject knowledge and rhetorical knowledge to compose a text that meets the demands of the audience, purpose, and context. The third process is one of carrying out these plans to produce the written text.

Let me propose that these three processes correspond generally to the three conditions of creativity defined earlier. For non-literary writing, problem finding holds the most potential for

originality, whereas problem solving with its planning and implementing processes presents occasions for adaptation and realization. While the property of originality is not restricted to problem finding (a writer's style, for instance, might be highly original), in non-literary writing with its adherence to standard form, usage, and format, the problem-finding process seems the most open to innovation. Perhaps because writers of non-literary texts tend to *perceive* their tasks as given—given by the teacher or defined by the context of work—they often fail to exploit or even to recognize opportunities for problem finding in the writing task. Nor are they likely to have learned to do so since much modern composition theory and its pedagogy focus instead on rhetorical problem solving.

Two examples will illustrate my point. In *Problem-Solving Strategies for Writers*, Flower offers guidelines for "writing in the real world and handling the problems people face when they need to write academic papers, persuasive reports, concise memos, and essays . . ." (1). She casts the student writer in the role of problem solver from the beginning, leading him to identify goals for writing and showing him how to reach them. Most of her instruction addresses rhetorical problem solving, helping students to suit their texts to the audience, purpose, and context. Such adaptation is necessary to the "practical creativity" that successful real-world writing requires.[2] In the preface to *Composition: The Creative Response*, Ruggiero explains how writers can realize their plans through creative application of common rhetorical devices: "The greater a writer's mastery of both self and the rhetorical principles and strategies proven effective over the centuries, the freer that writer is to make the choices that will express his or her creativity" (xvii). Ruggiero advises student writers to "keep in mind that what many people call writing talent is often no more than creative applications of writing techniques, and there's no magic in that" (107-108). Textbooks such as Flower's and Ruggiero's are valuable tools for helping students solve writing problems and realize their goals through systematic applications of proven rhetorical strategies. Thus current pedagogy addresses two of the three conditions for creativity.

What is missing in our teaching of non-literary writing, however, is attention to the first condition of creativity, that of originality or novelty. In an effort to define a theory of authorial innovation, Kaufer and Geisler argue that "novelty as a writing

standard, much less strategy, is absent from our pedagogical traditions in composition . . . . As members of a discipline, we position newness at the center of our own authorial plans, yet find ourselves reluctant to bring our standard to the classroom. We direct students to write an 'original' essay, but by 'original' we typically only mean 'free of plagiarism' or 'in one's own voice' rather than new" (287, 305). Defining "novelty" as it applies to non-literary writing can be as problematic as defining "creativity." Based on a review of the literature of social communication and sociology of science, Kaufer and Geisler assert that the notion of newness, at least in academic writing, is "less a property of ideas than a relationship between ideas and communities"; a writer builds on shared knowledge in a discipline while at the same time declaring new knowledge by supporting a claim against the old (288, 307). Or as Bizzell explains, we must see students "as problem-solvers situated in discourse communities that guide problem definition and the range of alternative solutions" (222). Jackson and Messick support the role of a social group in defining novelty. In their model of creativity, they explain that unusualness must be judged by comparison to norms: "Clearly, the choice of an appropriate population or norm group against which to judge a creative work is of utmost importance in applying the standard of unusualness" (313). For example, what might be judged as a novel recycling project at a junior high science fair, earning its originator praise for her creativity, would not likely receive the same reviews if an environmental scientist presented it to distinguished colleagues at an international symposium. To encourage creativity in non-literary writing, we must stress to students the value of novelty and judge the creativity of their products within an appropriate discourse community.

The relationship between novelty and problem finding in the creative process is not a new issue. Einstein and Infeld in 1938 suggested that in creative efforts, forming a problem might be more important than solving it: "To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination" (92). More recently in *The Creative Vision: A Longitudinal Study of Problem Finding in Art*, Getzels and Csikszentmihalyi report research designed to discover exactly what artists do when they produce a work of art. They conclude that problem finding is "positively related to the quality of artistic performance" (171). When Moore reconstructed their study using

middle school writing students instead, he found that those who showed concern for problem discovery at the problem-formulation and problem-solution stages wrote more original essays (93).

Problem finding is truly creative thinking at its best. According to Getzels and Csikszentmihalyi, "To turn from a problem solver into a problem finder one must feel that there is a challenge needing resolution in the environment . . ." (81). That challenge sparks creativity. The authors of *Rhetoric: Discovery and Change* are more specific about how writers identify problems:

> a person's image of the world is composed of attitudes, values, beliefs, and various kinds of information, all of which combine to form an exceedingly complex, more or less coherent system. Problems arise when features of the image are perceived to be inconsistent with one another, to clash in some way . . . . When a person becomes aware of such an inconsistency, he finds himself in what might be called a *problematic situation*. The uneasy feeling that accompanies this awareness is characteristic of the earliest stage of inquiry.
>
> Because the image held by each of us is in some respects unique, our problems are frequently unique. (90)

Although problem finding is represented here as a kind of introspective and private discovery, a similar recognition of inconsistencies or gaps in the knowledge structure of a discipline can lead to more collaborative and public kinds of problem finding. This state of cognitive dissonance, according to Lauer and co-authors, is "one of the best frames of mind for creativity, because it sets the climate for making discoveries, for learning" (24). Without first perceiving a problem, a writer cannot experience the "Ah ha!" or the Write Idea that motivates the resulting text.

Getzels and Csikszentmihalyi identify two scenarios: "*presented problem situations* where the problem has a known formulation, a routine method of solution, and a recognized solution" and "*discovered problem situations* where the problem does not yet have a known formulation, a routine method of solution, or a recognized solution" (79). Literature on problem solving often classifies these situations as algorithmic and heuristic, respectively. Indeed some non-literary writing is by nature algorithmic. Consider the writing of resumes, for example. Although the writer has some leeway in the organization and format, she generally presents the facts objectively and succinctly. While the content is specific

to the individual, resumes generally tend to resemble each other. Occasionally, though, even algorithmic writing can invite discovery. When the Korbel Champagne Company sought a director to speak, write, and conduct research on romance, they advertised for a candidate who would "personify romance in some highly visible or glamourous way." Some of the 400 applicants saw the job opening as a chance to display creativity by sending flowers, balloons, videotapes, and poetry with their applications (Bovee and Thill 1,2). Thus, how the writer perceives the writing situation determines whether he will take an algorithmic or heuristic approach.

Different problem situations call for different kinds of invention. In "Issues in Rhetorical Invention," Lauer traces conflicting definitions and applications of invention from classical to modern times. Textbooks today, she argues, tend to assign to invention (or prewriting) one of two roles: a "supportive purpose, to help writers find material, subject matter and lines of argument" and "an investigative purpose, to prepare writers for judgment." In the first, invention functions to "develop a thesis already at hand," gathering recalled knowledge; in the second, it leads to the discovery of insights, serving as an epistemology for inventing knowledge (135, 136). Much non-literary writing, particularly that which follows from presented problems, calls for supportive invention. Because the writing task emerges from the day-to-day activities in the classroom or at work, and because the problem is already clearly defined, maybe even solved, the writer recalls and applies knowledge to an essay exam, a memo, or a lab report, for example. Such kinds of academic and professional writing, purely routine and pragmatic, are not creative. However, some non-literary writing such as an unsolicited proposal, a research paper, or a personal experience essay may originate from a discovered problem and therefore have potential for creativity through investigative invention or problem finding.

PROBLEM FINDING AND CREATIVITY: AN EXAMPLE

To illustrate how problem finding can lead to creative writing, let me describe the work of Kathy, a college freshman in an introductory composition class. The experiential writing assignment she was given is fairly routine: tell something that happened to you that changed your outlook on life so that others might learn from it too. Her response to the task, however, was not so con-

ventional. Through invention exercises, Kathy discovered a problem which enabled her to make the assignment her own—one she completed as much for herself as for her teacher.

Kathy began her prewriting with this list of possible topics related to developmental changes: being an Air Force wife, the best/worst places I've lived, how age affects learning to swim, going back to school after 15 years. She finally opted to explore the last item on her list: "My Ten-Year High School Reunion." Next, Kathy did a looping exercise, a series of three five-minute free writings. At the end of each, she summarized her main point and used it to begin the next writing session (Cowan 13-15). Her first loop gave background about living in Arkansas, receiving the reunion announcement, and letting her husband Leroy coax her into going. Summarizing her first session, she wrote, "I was afraid to go to the reunion but had to anyway." In her next loop, she told about the reunion, describing some former classmates in attendance and her high school memories of them. However, none of her friends had returned, prompting her to distill her second writing this way: "No one remembered me and I felt awkward. I felt as if I didn't belong." Picking up on these feelings, her third and final loop recalled insecurities, embarrassments, and rejections in high school. At the reunion, a yellowed senior English paper was returned in which she had set ten-year goals. She wrote, "I was amazed and depressed to find basically I'd accomplished my meager goals."

Up to this point, Kathy's invention had been mostly supportive as she recollected experiences and impressions related to the reunion. But with her final summary of the looping exercise she took a more investigative stance: "No one changed, [they] just grew older. People weren't what I'd perceived them as in H.S. How do I relate to them?" The dissonance is evident here. At first, Kathy claims that former classmates had merely aged, not changed. Yet in the next sentence, she admits that they were not as she had perceived them in high school. With this conflict and the subsequent question, "How do I relate to them?" Kathy articulated the two basic components of a problem, a problematic situation and an unknown (Young et al. 92). She posed a question that required her to make sense of it all; she had found her Write Idea. Although her work so far had been fairly spontaneous (she had been writing for about fifteen minutes), she took a reflective attitude in five subsequent drafts as she investigated her feelings.

Her successful resolution is recorded in the last half of her final essay:

> All too soon, the day of the reunion arrived. My husband and I drove to the Elks' Lodge. The sultry afternoon wilted my spirits along with my hair and makeup. Pulling down the visor mirror, I saw a stern, heat-flushed face. Leroy didn't perceive the disapproval evident in my eyes. I hoped that no one would know that my dress wasn't new or that my hair was too short. As people scurried toward the door, I searched eagerly for Vicki, Patty, or Donna.
>
> The car became an oven, forcing us into the crowd. My stomach wrenched tightly, and I wanted to run away. The timid high school girl had re-emerged inside of me . . . .
>
> Inside the Elks' Lodge, the pungent smell of stale beer and thick cigarette smoke hung together like smog. Chattering around us were unchanged voices that brought back memories of each face. Their Utah drawl clung to each word.
>
> The noisy procession of people bottlenecked on the half-lit staircase leading to the ballroom. A boisterous voice a few steps ahead belonged to an old crush, Dirk Davis. He was now surprisingly quite bald. Dirk's tone quickly turned to ridicule when he noticed Louis Lucero in the ballroom proudly wearing an Air Force uniform. I knew that uniform well. Leroy wore his to work, back in Arkansas, just as proudly.
>
> Relieved that Leroy hadn't heard Dirk's remarks, I continued to search the musty ballroom for friends. Faces faded into the dusty sunbeams sneaking through the dark curtains. No one ventured away from their high school cliques. "Where were my good friends?" I sadly thought.
>
> Leroy left to buy drinks. He had been a well known track star who would have been the life of the party at his high school reunion in Louisiana. I had played the clarinet in the band while wanting to march with the Lakettes. Again I stood alone among the same people who I once wanted to accept me.
>
> The program announcement boomed over the loud speaker, and I found Leroy in time to get seats. Former cheerleaders, homecoming queens, Lakettes, and sports heroes were once again being honored. Nothing had changed.

When the band drowned out the chance for further conver-
sation, we agreed to leave . . . .

As Leroy and I walked to the car, the mounting weight
of bitterness began to lift. Once inside, I took a long look
into the visor mirror. A relaxed face had replaced the stern
one of before. The shy high school girl had vanished. This
time I saw a woman who'd left Utah to live in five different
states and raise two beautiful children, often on her own.
I saw a woman able to make new friends at each new place.
Finally, I could see those high school heroes for what they
were, ordinary people. It didn't matter now that they had
rejected me. For the first time, I was intensely satisfied simply
to be me.

To what extent is Kathy's essay creative writing? Does it meet
the three conditions of our operational definition? First, is it novel?
Yes, because each individual's experiences are unique, Kathy's
autobiographical account for her high school reunion is original.
Her rich description and specific details further distinguish her ex-
periences from those of others who have attended such events.
Even more unusual, however, is the purposefulness with which
Kathy writes, purpose motivated by an original problem. Her in-
sights set her apart from most novice writers; less able writers tend
merely to relate events, hoping that others might find meaning
in them. Second, is the essay adaptive to reality? Yes, it solves
the problem Kathy articulated for herself. The satisfaction she ex-
presses at the end of the essay reflects her new understanding
of her relationship to former classmates. In a journal entry in which
she talked about her writing, Kathy explained: "When I wrote the
essay, I re-lived the whole experience, which was traumatic for
me each time. In the essay, I wanted to reach people who were
just like me. I had a warm feeling about that essay." Finally, does
it fully develop the original insight? Yes, by the end of the essay
Kathy and her readers understand the significance of the event.
The goal to help others and the need to sort out the experience
for herself motivated Kathy through multiple drafts. Indeed, in-
trinsic rewards such as self-satisfaction rather than extrinsic ones
such as grades are incentives for creativity (McGraw 37).[3]

Some might question my choice of a personal experience
essay to illustrate creative non-literary writing since a form so closely
related to autobiography can be read as fiction instead of non-

fiction. Perhaps because experiential writing often has literary characteristics such as narrative structure or figurative language, it is easier to see it as creative writing. Nevertheless, creative referential and persuasive writing exists too as evidenced in the anthologies used in composition classes. *Our Times /2*, for example, is a collection of literary and non-literary pieces from recent periodicals organized in a problem finding format with each chapter focused on a current question. For instance, the section on "The American Adolescent" poses the general question, "What's Happening with Today's Youth?" In the essays that follow, the writers avoid cliched responses by asking their own tough questions and taking non-conventional approaches to get at the critical issues. In an informative article, "A Much Riskier Passage," Gelmen analyzes sociological data to reveal how being a teenager is more stressful in the nineties than in the sixties. In an experiential piece, "The Lives of Teenage Mothers," Marek recounts visits to a Bronx parenting program to learn more about teenage mothers—"Are they ignorant about birth control, or are they choosing to get pregnant? What are the conditions of loneliness, poverty, and hopelessness in which having a baby might make sense? What happens to these girls and their babies? How does having a baby affect their lives? Where do the fathers fit in?" (55-6). And in a causal analysis, " 'You Wanna Die with Me?' " LeBlanc returns to her hometown to investigate its high rate of teen suicides. Problem finding and solving characterize this collection; so does creative writing.

As we begin to recognize the capacity for creativity in non-literary writing and in all writers, many good things we have discovered or rediscovered in recent composition pedagogy have potential for cultivating creativity; foremost among these is original problem finding. A problem-finding pedagogy is a difficult one since humans avoid dissonance rather than seek it. Yet, as Young, Becker, and Pike remind us, "it is the perceptive and knowledgeable person who most often has problems; it is the best student who sees the limitations of human understanding and the need for inquiry in every aspect of human affairs" (91). Students who strive for creativity in non-literary writing will reap important rewards: self-motivation, learning, good writing.

By expanding the definitions of "creative writing" and the "creative writer" and in demonstrating the value of problem finding for non-literary writing, we raise more questions: How can we integrate problem finding and the related issue of novelty into

composition pedagogy? How do we structure assignments to encourage discovered problem situations? What kinds of invention foster creative thinking, particularly problem finding?[4] How can we show students through our teaching and evaluation that we value creativity in all kinds of writing? In *Process and Reality*, Whitehead explains: "The true method of discovery is like the flight of an aeroplane. It starts from the ground of particular observation; it makes a flight into the thin air of imaginative generalization; and it again lands for renewed observation rendered acute by rational interpretation" (5). Charged with the task of teaching creativity in non-literary writing, we discover new problems and prepare to take off again.

NOTES

[1]In addition to describing four traits of the creative person, Jackson and Messick's model identifies properties of creative products (unusualness, appropriateness, transformation, and condensation); standards by which to judge these properties (norms, context, constraints, and summary power); and aesthetic responses (surprise, satisfaction, stimulation, and savoring).

[2]In the preface to her second edition, Flower writes that "the beginning chapters of the book are focused on 'problem-finding' itself—on the act of discovering and understanding problems in one's own thinking and experience" (v). One brief section in Chapter 2 explains that "If you can define the problem you may have solved it. The hardest part of solving many problems is trying to discover what the problem really is and define the conflict that makes it a problem" (23). Most of the text, however, discusses ways to identify general rhetorical problems such as "How do I present this idea to my audience?" rather than addressing ways to find original, context-specific problems. For a further critique of the limits of Flower's approach, see "Cognition, Convention, and Certainty: What We Need to Know about Writing" in which Bizzell argues for "the necessary link between problem definition and interpretive communities" (232).

[3]In his review of the literature on the effects of extrinsic and intrinsic rewards on performance, McGraw concludes that extrinsic rewards facilitate algorithmic solutions but retard heuristic ones. Perhaps because much non-literary writing is linked to extrinsic rewards such as good grades or pay raises, writers tend to view such tasks as algorithmic and fail to realize the potential for the heuristic solutions and intrinsic rewards that are likely to spark creativity.

[4]To begin answering these questions, teachers will find helpful background reading in *Rhetoric: Discovery and Change*, particularly Chapter 5; "Preparation: Identifying and Stating the Problem," Young et al. (89-117); and the section on "The Absence of Newness in Writing Education," Kaufer and Geisler (304-09). For textbooks that take a problem-finding approach see *Four Worlds of Writing*, Lauer et al. and *The Informed Writer: Using Sources in the Disciplines*, Bazerman.

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