

Handbook of Creativity

PERSPECTIVES ON INDIVIDUAL DIFFERENCES

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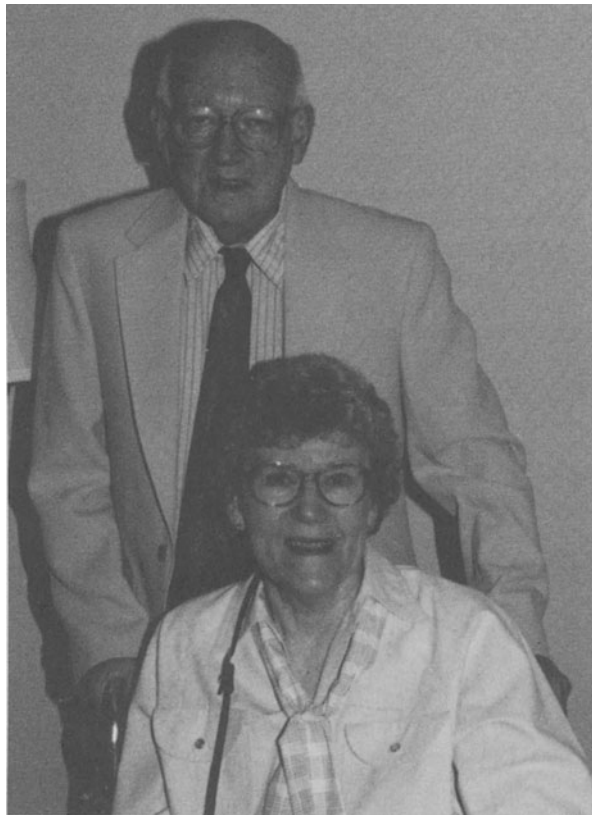
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This volume is dedicated to Dr. E. Paul Torrance



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Preface

The motivation underlying our development of a “handbook” of creativity was different from what usually is described by editors of other such volumes. Our sense that a handbook was needed sprang not from a deluge of highly erudite studies calling out for organization, nor did it stem from a belief that the field had become so fully articulated that such a book was necessary to provide summation and reference. Instead, this handbook was conceptualized as an attempt to provide structure and organization for a field of study that, from our perspective, had come to be a large-scale example of a “degenerating” research program (see Brown, Chapter 1).

The handbook grew out of a series of discussions that spanned several years. At the heart of most of our interactions was a profound unhappiness with the state of research on creativity. Our consensus was that the number of “good” works published on creativity each year was small and growing smaller. Further, we could not point to a journal, text, or professional organization that was providing leadership for the field in shaping a scientifically sound framework for the development of research programs in creativity. At the same time, we were casting about for a means of honoring a dear friend, E. Paul Torrance. Our decision was that we might best be able to honor Paul and influence research on creativity by developing a handbook designed to challenge traditional perspectives while offering research agendas based on contemporary psychological views.

The contributors to our volume were selected with extreme care, because our intent was *not* to put together merely a collection of “name” individuals in creativity. Instead, we chose to solicit chapters from people of extraordinary ability who we believed could step beyond the context of the literature on creativity and address aspects of the field from the broader perspective of contemporary psychology. It is our contributors who must be credited for the positive features of this volume. In our judgment, our contributors wrote chapters of uncommon erudition, chapters, we believe, will “make a difference.” The scholars represented in this volume made every effort asked of them and taught us a great deal about the meaning of scholarship. Any omissions or errors are our responsibility alone.

We had three major goals for this volume. First, we wanted to provide a critique of the level of development of research in creativity. Second, we wanted to articulate a series of research agendas that could lead to “progressive” rather than “degenerating” research programs. Third, we hoped to provide structure for the field either through intellectual leadership or, alternatively, by providing a target for researchers who wished to throw intellectual rocks at somebody. The first two goals are part and parcel of each chapter in this volume. The level of criticism ranges from questions about the utility of the concept itself (Brown) to the observation that there has been no research examining the role of perception in the creative process despite a great amount of talk about the issue (Flowers and Garbin, Chapter 8). The authors of each chapter also describe research agendas growing out of the contents of their chapters, agendas we believe could lead to fruitful, reinvigorated programs of research. Whether or not we have attained our third goal remains to be seen.

The handbook is organized into four parts. Part I, “The Nature of the Beast,” consists of six chapters

that examine basic issues related to the definition of creativity and how it is to be measured. Robert T. Brown begins with his chapter, "Creativity: What Are We to Measure?" which sets the tone for the volume as he analyzes the scientific utility of the global concept of creativity as well as the specific definitions of creativity that have appeared in the literature. The second chapter, prepared by Michael and Wright, is entitled "Psychometric Issues in the Assessment of Creativity," and follows directly from Brown's chapter but focuses entirely on issues often neglected in studies of creativity—the psychometrics involved in assessing the construct. In Chapter 3, "A Taxonomy and Critique of Measurements Used in the Study of Creativity," Hocevar and Bachelor build on the previous two chapters and provide an exhaustive analysis of currently available measures of creativity. Chapter 4, written by Woodman and Schoenfeldt, is entitled "Individual Differences in Creativity: An Interactionist Perspective." Their analysis of individual differences is followed by P. E. Vernon's chapter, "The Nature–Nurture Problem in Creativity." The final chapter in this part, "Creativity and Intelligence," was prepared by Haensly and Reynolds, who, in their chosen topic, return to the basic questions addressed in the first chapter concerning the nature of creativity.

Part II of the handbook, "Cognitive Models of Creativity," is devoted simply to that topic—the development and articulation of cognitively oriented models of creative thought. It opens with Hayes's chapter, "Cognitive Processes in Creativity." This general perspective then is followed by a focus on perception in the chapter written by Flowers and Garbin, "Creativity and Perception." Stein then emphasizes memorial processes in his chapter, "Memory and Creativity," and the focus shifts to how people think about their thinking in Armbruster's chapter, "Metacognition in Creativity." The last two chapters in this part of the book emphasize a developmental perspective. Moshman and Lukin examine the relationship between the development of reasoning and creative abilities in their chapter, "The Creative Construction of Rationality: A Paradox?" followed by Benack, Basseches, and Swan who discuss "Dialectical Thinking and Adult Creativity."

Part III of the volume is entitled "Personalological Variables and Creativity." This section, featuring four different perspectives on creativity based on personality dimensions, opens with Martindale's chapter, "Personality, Situation, and Creativity," which provides a general perspective on personalological approaches to creativity. Next, Dowd explores the construct of "self" and its relationship to creativity in "The Self and Creativity: Several Constructs in Search of a Theory." Prentky analyzes an extremely interesting topic in his chapter, "Creativity and Psychopathology: Gamboling at the Seat of Madness." Finally, Heppner, Fitzgerald, and Jones examine the role of creativity in therapeutic settings in "Examining Counselors' Creative Processes in Counseling."

The fourth part of the volume, "Applications," examines a broad array of issues involved in enhancing creative abilities. Three chapters emphasize the development of creativity in writing. Carey and Flower introduce the section with their chapter, "Foundations for Creativity in the Writing Process: Rhetorical Representations of Ill-Defined Problems," followed by one written by O'Looney, Glynn, Britton, and Mattocks, "Cognition and Writing: The Idea Generation Process." The last of the three chapters centered on writing takes a particularly effective applied approach as Colvin and Bruning examine "Creating the Conditions for Creativity in Reader Response to Literature."

Three chapters focus on science and social science. These chapters are organized by Clement's "Learning via Model Construction and Criticism: Protocol Evidence on Sources of Creativity in Science." A more applied approach can be seen in the chapter developed by Glynn, Britton, Semrud-Clikeman, and Muth, "Analogical Reasoning and Problem Solving in Science Textbooks." The last chapter in this sequence was developed by Voss and Means and is entitled "Toward a Model of Creativity Based upon Problem Solving in the Social Sciences."

The final two chapters in the volume are highly applied and emphasize the facilitation of creativity at different stages of life. Goetz's chapter, "The Teaching of Creativity to Preschool Children: The Behavior Analysis Approach," summarizes the last several years of her research program. The emphasis shifts to adults in Britton and Glynn's chapter, "Mental Management and Creativity: A Cognitive Model of Time Management for Intellectual Productivity."

A very large number of people were involved in putting this volume together—far too many for us to list in this brief space. Very grateful thanks, however, must be extended to some scholars who were particularly helpful. We thank Steve Benton and Barbara Plake for their erudite reviews. We thank Mike

Shaughnessy, former president of the National Association of Creative Adults and Children and editor of their journal, for frank discussions concerning the state of the field. John Zimmer, a man who needs no introduction, was his usual cogent and helpful self when asked to analyze difficult issues. We thank E. Paul Torrance, to whom this volume is dedicated, for his unflagging support and insistence on rigorous analyses of the area. Finally, we must thank Eliot Werner, our editor at Plenum, who encouraged the planning and development of the volume and was extremely helpful in shaping our thinking about the nature of this volume.

As is the case in any edited volume, the handbook did not turn out exactly as it was planned. Illnesses, family emergencies, job changes, and other circumstances sometimes defeat the best of plans. Consequently, chapters focusing on creativity in mathematics, creativity in music, and the development of cognitive skills in students were not included. Our greatest losses, though, were far larger and more deeply felt. Don MacKinnon, who was working on a chapter focused on the criterion problem, died last year. In addition, Philip E. Vernon died shortly after finishing his chapter for this volume. They will be sorely missed by their friends, family, and indeed all psychologists.

This volume does not represent a final effort. Hindsight shows us gaps and problems we should have foreseen but did not. In particular, we hope one day to be able to compile a more complete set of works focused on domain-specific creativity. We also hope to be able to examine the influence of journals and organizations on the quality of research in the area. In the meantime, we do very much hope that our readers find the chapters in this volume to be as interesting and exciting as we did.

JOHN A. GLOVER
ROYCE R. RONNING
CECIL R. REYNOLDS

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