

The Cambridge Handbook of Creativity

This second edition of the renowned *Cambridge Handbook of Creativity* expands on the classic text with over two-thirds' new material reaching across psychology, business, education, and neuroscience. It introduces creativity scholarship by summarizing its history, major theories and assessments, its development across the life span, and suggestions for improving creativity. The book then tackles how creativity is manifested in the world by exploring the biological, cognitive, and affective underpinnings of creativity, while noting the impact of individual and group differences. The chapters cover the cutting-edge topic of the genetics and neuroscience of creativity in addition to the relation between creativity and mental illness. The sociocultural influences are also examined by looking at how creativity in the classroom or workplace can be increased or impeded by a person's behavior, community, or environment. The breadth and detail of this edition expertly summarizes creativity's relationship with cognition, intelligence, personality, and motivation.

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Second Edition

Edited by

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University of Connecticut

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For our wives and children, with love:
Allison, Jacob, and Asher – JCK
Karin, Seth, Sara, Sammy, Brittany, and Melody – RJS

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Foreword

The Rewards of Creativity

Very few creative ideas or products are the result, in my opinion, of a rational cost–benefit calculation. None of the highly creative individuals I interviewed for my book on that topic (*Creativity, Flow and the Psychology of Discovery and Invention*, 1996) became interested in the work that brought them fame and occasionally fortune because they figured it would make them rich. Even though some of them became world-famous, their lifestyle remained simple and largely unchanged, and in some cases not much more affluent than it had been when the scientist or artist was a hardworking student.

Of course, the fact that extrinsic rewards are not very salient in creative persons' lives does not mean that there are no rewards in being creative. On the contrary, their lives are rich and enviable; but usually not for material reasons. The rewards of a creative life tend to be experiential; in other words, they are not valued on the market, yet they contribute mightily to a life that is worth living.

So what rewards does creativity bring? One cannot answer that question from a strictly materialistic, or behavioristic, understanding of the human condition. But if we realize that people do have what Maslow called “higher order” needs, then the answer is rather obvious. We like to discover things, to make things – from a good meal to a pleasant drawing, from a good joke to a beautiful dress. More than seven centuries ago, Dante Alighieri described Odysseus trying to recruit shipmates for his plan to sail where no man had sailed before with the words: *Fatti non foste per viver come bruti, ma per seguir virtute e conoscenza*. In other words: You were not made to live like the beasts live, but to pursue virtue and knowledge.

In many ways, Dante might have been more right about this than many contemporary psychologists recognize. All it takes is to watch an infant explore his or her crib, then the room around it, and the genuine joy on his or her face when they find something new or when they achieve what Jean Piaget called “the pleasure of being a cause,” like learning how to bring light to a dark room by using the switch on the wall, or making water appear by operating the bathroom faucet. Actually, Dante might have underestimated the importance of the rewards that mastery provides. As we now know, even beasts – monkeys and rats – will expend much effort in order to see something new or to explore their environments.

The rewards for creative people are based on the simple joy all living things experience when they can use whatever skills they possess – in other words, when they can fully be themselves and express their unique beings. This is the condition that I have called the flow experience – an experience that most people have

occasionally had in their lives, though few are able to find it in their work, and have to look for it in leisure activities or, if they are lucky, in personal relationships. Creative individuals are fortunate in that they are able to find flow in activities that, in addition to providing them with the intrinsically enjoyable experience of flow, also provide a professional identity and financial compensation.

People in flow describe their most enjoyable experiences in similar terms. They pay attention to a restricted set of stimuli – the artist to his canvas, the musician to her instrument, scientists to the problem they are tackling – and within that narrow field of vision they can achieve a sense of control as well as a feeling of freedom that is hard to achieve in ordinary life.

When describing how he feels when working in his research lab, George Klein, a leading cancer biologist had this to say: “I feel like a young deer gamboling in a meadow full of flowers.”

Another respondent in the study of creative people, a research biologist known for several important breakthroughs in her discipline, expressed succinctly sentiments that many others used to describe their lives: “I have been married for some forty-four years to someone I adore. He is a physicist. We have four children, each of whom has a PhD in science, each of whom has a happy life.”

Of course, there are also many people who, while they achieve great creative breakthroughs in a specific field of art or science, neglect other fundamental aspects of their selves – e.g., relationships, family, or health. If these are indeed important components of a person’s self, then neglecting them for the sake of creative work in one discipline might in the long run be a source of regrets and misery.

Creative people, like everyone else, have limited time to experience life and limited energy to do so. Some are able to make choices that by the end of life add up to a harmonious whole. Others, even though they may have achieved worldwide renown in their field of action, do not. How to achieve the first result rather than the second is still a largely unexplored topic in our understanding of creativity.

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