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THE WAY WE THINK



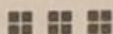
CONCEPTUAL BLENDING
AND THE MIND'S
HIDDEN COMPLEXITIES

GILLES FAUCONNIER

MARK TURNER

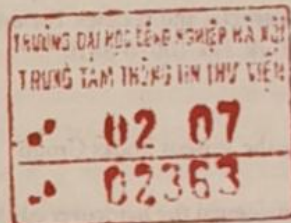
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Conceptual Blending and the Mind's Hidden Complexities



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Conceptual Blending and the Mind's Hidden Complexities

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First published by Basic Books, a member of the Perseus Books Group, in 2002.
First paperback edition published in 2003.

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Designed by Trish Wilkinson
Set in 11-point AGaramond by the Perseus Books Group

The Library of Congress has catalogued the hardcover edition as follows:

Fauconnier, Gilles.

The way we think : conceptual blending and the mind's hidden complexities / Gilles Fauconnier, Mark Turner.

p. cm.

Includes bibliographical references and index.

ISBN 0-465-08785-X (hc.); ISBN 0-465-08786-8 (pbk.)

1. Concepts. 2. Thought and thinking. I. Turner, Mark, 1954- II. Title.

BF433 .F38 2002
153.4—dc21

2001052925

■ ■ PREFACE

FIFTY THOUSAND YEARS AGO, more or less, during the Upper Paleolithic Age, our ancestors began the most spectacular advance in human history. Before that age, human beings were a negligible group of large mammals. After, the human mind was able to take over the world. What happened?

The archeological record suggests that during the Upper Paleolithic, humans developed an unprecedented ability to innovate. They acquired a modern human imagination, which gave them the ability to invent new concepts and to assemble new and dynamic mental patterns. The results of this change were awesome: Human beings developed art, science, religion, culture, sophisticated tools, and language. How could we have invented these things?

In this book, we focus on *conceptual blending*, a great mental capacity that, in its most advanced "double-scope" form, gave our ancestors superiority and, for better and for worse, made us what we are today. We investigate the principles of conceptual blending, its fascinating dynamics, and its crucial role in how we think and live.

Conceptual blending operates largely behind the scenes. We are not consciously aware of its hidden complexities, any more than we are consciously aware of the complexities of perception involved in, for example, seeing a blue cup. Almost invisibly to consciousness, conceptual blending choreographs vast networks of conceptual meaning, yielding cognitive products that, at the conscious level, appear simple. The way we think is not the way we think we think. Everyday thought seems straightforward, but even our simplest thinking is astonishingly complex.

The products of conceptual blending are ubiquitous. Students of rhetoric, literature, painting, and scientific invention have noticed many specific products of blending, each one of which, in isolation, seemed remarkable at the time, in its strange and arresting way. These scholars, ranging from Aristotle to Freud, took these specific instances to be exceptional, marginal eruptions of meaning, curious and suggestive. But none of them focused on the general mental capacity of blending or, as far as we can tell, even recognized that there is such a mental capacity. Attentive to the specific attraction—the painting, the poem, the dream, the scientific insight—they did not look for what all these bits and pieces have in common. The spectacular trees masked the forest.

Our own work started with just such curious and suggestive examples. But by making precise their underlying principles, we began to get glimpses of an entire forest behind the trees. We discovered that the same cognitive operation—conceptual blending—plays a decisive role in human thought and action and yields a boundless diversity of visible manifestations.

This was an exciting but also shocking discovery, running as it does against much conventional wisdom. We had certainly not set out to prove anything of the sort. Rather, like Aristotle and Freud, and others less illustrious in this tradition, we began by looking at striking and, we thought, exotic examples of creativity, such as analogical counterfactuals, poetic metaphors, and chimeras like talking donkeys. By 1993, we had amassed overwhelming evidence from many more fields—grammar, mathematics, inferencing, computer interfaces, action, and design. This launched a general research program into the nature of conceptual blending as a basic mental operation, its structural and dynamic principles, and the constraints that govern it.

Coming from a different angle and with very different kinds of data, several “creativity theorists” were speculating on the existence of a general mental capacity—called “cognitive fluidity” by Stephen Mithen—that brings together elements of different domains. Mithen and others linked the availability of this capacity to the explosion of creativity in tool-making, painting, and religious practice, dated by archaeologists to roughly 50,000 years ago.

In this book, we argue that conceptual blending underlies and makes possible all these diverse human accomplishments, that it is responsible for the origins of language, art, religion, science, and other singular human feats, and that it is as indispensable for basic everyday thought as it is for artistic and scientific abilities. Above all, it is our goal to do what has not been done before: to explain the principles and mechanisms of conceptual blending.

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