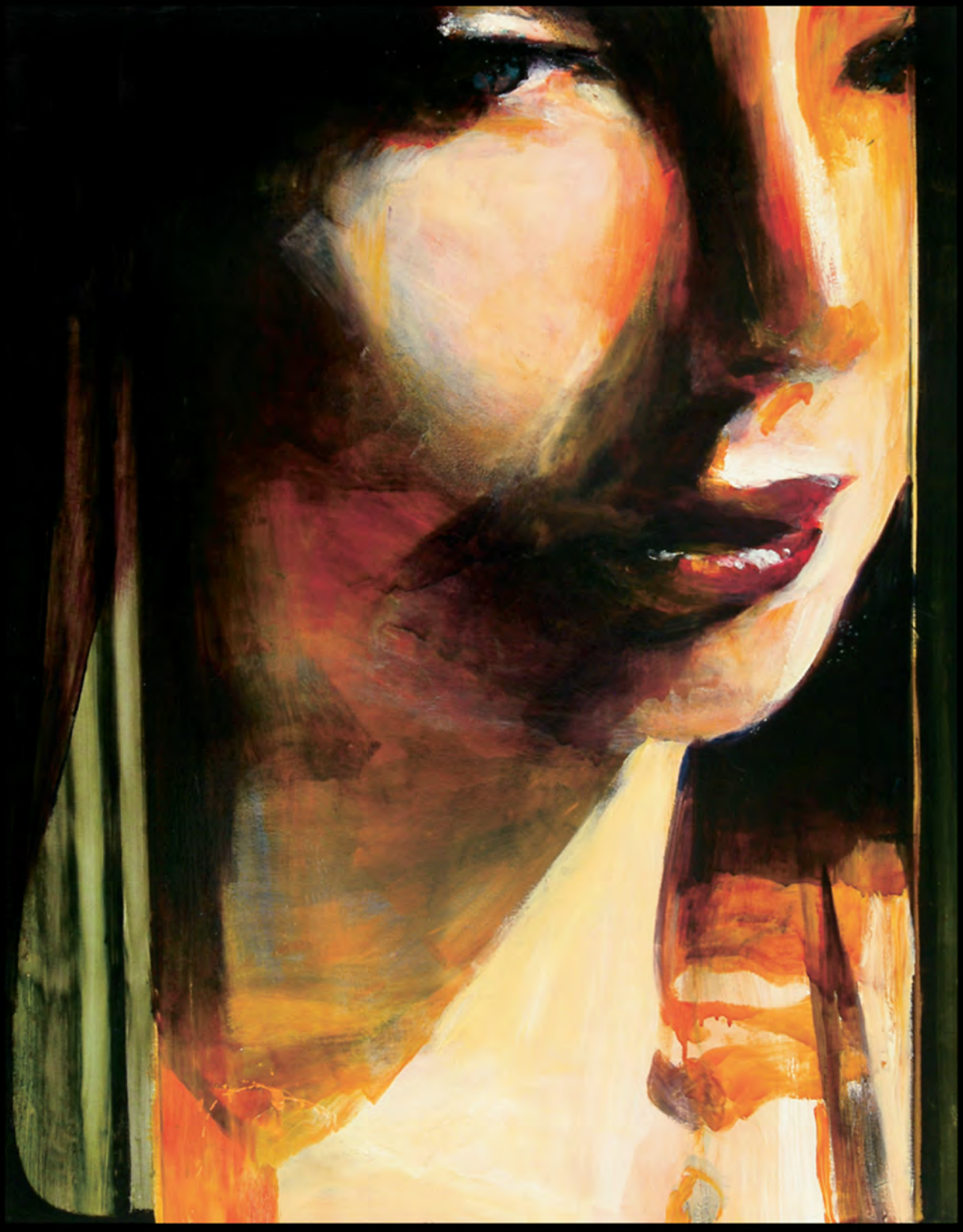

Visual Communication

Integrating Media, Art & Science

Rick Williams & Julianne Newton

VISUAL COMMUNICATION

Integrating Media, Art, and Science

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Left: Hidden Mind by Melissa Szalkowski. Original in color.

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PREFACE
Knowing Before Words

No form of communication has a more profound effect on the private minds of individuals or the development of the public mind and culture than the visual imagery of today's media. Images are the primary carrier of media messages produced by the most sophisticated handlers of media-savvy politicians, corporate public relations campaigns, and product advertising. Visual images produced and delivered by television, print media, movies, video games, and the Internet are so pervasive that they touch and profoundly affect the lives of all citizens of 21st-century global cultures.

Before and beyond the ability of words, visual images communicate complex and complete concepts instantaneously to the whole mind. Advances in neuroscience and psychology indicate that the human brain uses imagery, as well as other information perceived by the senses, to guide our actions subconsciously before sending information to the neocortex, the center of words and rational thought. We also have evidence that our nonconscious brains do not distinguish between mediated images and what we see in real life. The brain encodes both forms of imagery into memory as if they are real and as if we have perceived the information directly from real-life experiences. This research, along with other work in brain science, education, art, and communication, has catapulted visual issues to the forefront of scholarship in such seemingly disparate fields as science, art, and media studies.

To become an educated person in the 21st century requires not only verbal and mathematical proficiency but also the ability to interpret, critique, create, and use visual communication on sophisticated levels. In today's visual world, most individuals — even those with advanced education — are ill equipped to distinguish their own perceptions of reality and the behavior those perceptions generate from realities generated by mediated messages. Furthermore, even navigating contemporary culture with conscious awareness of external perceptual influences requires at least minimal mastery of the basic techniques of image production, distribution, and consumption. Most important is appreciation for

Left: Figure P.1. Undiscovered Self by Jerry Uelsmann. Original in color.

the profound effects of imagery on individuals and the communities in which they live. Visual and media literacy are as important to the 21st-century mind as verbal and mathematical literacy have been and continue to be.

This book focuses on cultivating integrative mind processes that facilitate visual and media literacy from both consumption and production points of view and across the boundaries of traditional academic disciplines. We do this by helping you become aware of and use your intuitive cognitive processing abilities. That, in turn, will help you better understand and use visual communication to enhance your intelligence, creativity, problem solving, and performance in education and in life. Two points are significant here. One, by *intuitive cognitive processing abilities*, we refer to those ways we know and understand without the need to consciously or purposefully seek that understanding. One way to think of intuitive processing is as a powerful form of mental activity that occurs before and beyond consciousness and that guides our perceptions of reality and our behavior. Our purpose here is to focus on ways we can access those powerful parts of the mind that are primary guides of everyday life — and we call that process intuitive cognition. We will more fully explain these terms as we work through the book. Two, by *literacy*, we refer to the ability to use (write or create) a means of communication effectively, as well as to the ability to understand (read and interpret) the symbols of that system. Our goal with this book is to integrate the complex, multidisciplined fields employing visual symbols into an easily understood model of balanced intelligence and visual communication. To do that, readers must focus attention on their visual processing skills. Ultimately, we want readers to use the ideas and skills presented in this book to better use all of their cognitive abilities as integrative complements.

As a primary text for introductory-level courses focusing on the visual, *Visual Communication* grounds you in current visual research and visual means of communication. Creative exercises teach you how to apply these new ideas to enhance both your understanding of and work with images. Used as a supplementary text, *Visual Communication* can enhance courses in which new ways of creative thinking and living are a major focus — ranging from the physical and social sciences, through new and traditional arts, and through media studies.

Key Reasons to Read This Book

First, within these covers lie ideas and practices we believe are significant to the future of human life — and more specifically, to how individuals can live informed, creative, and balanced lives that sustain rather than drain personal and communal resources. The contents of this book are the result of our work with close to 10,000 individuals over the last 30 years in four institutions of higher learning, as well as more than 100 conference and workshop presentations throughout the United States and in Australia, Brazil, Canada, France, and

Mexico. Both current and past students tell us the positive impact our work has had on their lives. What we present to you also results from our own personal and scholarly growth experienced during that time. We do not claim to have all the answers. We know our goals are ambitious and idealistic. We do believe, however, that we have wisdom to offer — wisdom that can help anyone who wants to make life better at any level.

Second, we feel compelled to address a void in the preparation of tomorrow's global citizens — whether professional communicators, artists, social scientists, physical scientists, or everyday users of media, art, and science in various forms. A remarkable research movement in neurobiology and cognitive studies is cutting a path through what before seemed impenetrable — understanding how human beings perceive and know, and why they act the ways they do. Central to this new research is clarity about the significance of visual communication and intuitive processing to ways of knowing, creative problem solving, responding to the world, and interacting with one another. We believe we all can use this new information to further the conscious evolution of humans toward a socially responsible and sustainable global culture. We do have choices, as individuals and as collectives. We make these choices — on conscious and subconscious, rational and intuitive levels — every day.

From a neurobiological perspective, our intuitive intelligences, which include our visual intelligence, represent at least half of our cognitive abilities. Our intuitive processing abilities are equally as complex and far faster than are our rational intelligences. Scientific evidence supports the idea that our intuitive intelligences influence and guide rational intelligences. In fact, according to recent experiments, without access to our nonconscious abilities, it may not be possible for an otherwise normal human being to make advantageous decisions based on reason.

This new understanding of how nonconscious processing of both new and previous experiences affects our behavior has yet to be incorporated throughout even the most advanced societies. Our educational, scientific, economic, political, and cultural systems continue to ignore the great, untapped potential of our intuitive intelligences. The result is what we call intuitive illiteracy, a pervasive lack of ability to access intuitive intelligences on the sophisticated levels that can facilitate creative problem solving and advantageous decision making on the most advanced levels of cognition.

However, the power of intuitive cognition has not been completely ignored. Media practitioners and educators in media, advertising, and public relations work hand in hand with researchers in cognitive neuroscience, psychology, art, and communication. Their quest is to understand how best to use media processes to influence public attitudes, and perceptions of reality. Ultimately, the result is persuasive communication that subtly shapes the public mind and public behavior.

We believe this sophisticated use of intuitive communication techniques on an intuitively illiterate culture is the fundamental reason media messages have such influence over our lives. Media messages regularly encourage us to seek personal meaning through wealth, the consumption of products, and the collection of material objects. In such a culture, the environment; intrapersonal and interpersonal relationships; physical health; spirituality; and care for the elderly, the poor, and the disadvantaged too often take a back seat to the quest to attain goods, wealth, and individual and corporate power.

It is important to note here that we are not saying that all media are destructive. Contemporary media, including advertising, produce some of the most creative art in our culture. In fact, a great deal of advertising supports prosocial aims, such as providing revenue for a free press and free media. Nevertheless, an educated person needs to be aware that he or she sees an estimated 3,000 to 4,000 media images every day. According to Robert Coen's "Insider's Report," world advertising revenues were expected to be $604 billion in 2006. Since 1950, product manufacturers have used more of the world's natural resources than were used by the entire world throughout the rest of history.

Our point is that most media are highly intuitive in that they are visually, musically, and psychologically provocative. Media imagery often associate such qualitative values as love, family, friendship, beauty, freedom, wealth, and happiness with material goods. Advertising, for example, appeals to the intuitive mind to sell values and lifestyles, and then associates the purchase of products with the fulfillment of these human values, needs, and desires. We see these values and lifestyles not only in advertising but also in nearly all other forms of media communication. Logically, we know that buying a certain product will not fulfill our needs for friendship, love, or family, yet we buy the products at record levels while genuine self-esteem plummets and social problems soar.

Whether by intention or ignorance, our educational systems and our societies in general have oppressed the development of intuitive intelligence, leaving the populace intuitively illiterate. Using highly intuitive messages, media both support and feed on our intuitive illiteracy. The media are primarily owned and dominated by such multinational conglomerates as General Electric, News Corporation, Disney, Viacom, CBS Corporation, and TimeWarner. Many corporations have taken advantage of our weakening antitrust laws and our political system to build companies that now dominate both media and government. If current trends continue, they will soon dominate formal education. Our collective intuitive illiteracy allows corporate-dominated media messages to shape our perceptions of reality and thus guide our behaviors. The ultimate purpose of the messages is exploitation of economic and cultural systems on a vast scale. In such a culture, dominant values will be corporate values, and activity will be governed by the economic bottom line. Often forgetting its mission to educate at "higher" levels, higher education

increasingly prepares students to become cogs in a largely corporate world. Those who pursue careers in newspapers, for example, are likely to land jobs with media chains, whether those jobs are news oriented or marketing oriented. Should they be creatures of great conscience, they will experience enormous conflict between their ideals of practicing socially responsible communication and the realities of profit-driven media companies. Artists, scientists, and business people alike face similar conflicts.

What You Can Do About It

These are strong words. By using the abilities of your whole mind to look at our world with clear vision and personal reflection, we believe you will see that our concerns are warranted. Whether you agree with us about issues of corporate influence is not essential. We ask that you read our ideas about your visual and intuitive intelligences with a mind that is open to possibility — the possibility that you can draw on the enormous potential of your own fully developed intellectual abilities to live a more fully and meaningfully balanced life in our complex world.

As scholars, artists, and educators — and concerned citizens of this earth — we offer you the means by which you can learn to discern and rectify imbalances within yourself, your community, and society at large for the common good of humankind. This we believe is the mission of education. Our goal is lofty, yes, but much can be gained in its pursuit. Consider the alternative — not to try?

We seek to arm you, our readers, with the knowledge and skills to change the way you live and interact with the broader culture. We are not alone in this pursuit. Many independent and alternative publishers, highly aware editors and writers, perceptive visual communicators and business people, soulful scientists and artists, conscientious parents, and other like-minded professionals, scholars and educators seek to educate the whole person and facilitate socially responsible, conscious living in a globally sustainable culture. This book is our way of contributing to that end.

At the heart of this book is a new, balanced approach to the study of intrapersonal, interpersonal, and mass communication. Communication is shared meaning. In its best sense, it aspires for universal understanding — the idea that every person can share meaning with, or understand, every other person. But understanding alone is not sufficient. Sharing is a process, a continual exchange of messages in many forms, a continual seeking to understand ourselves and how we interact with the world around us. And that exchange of messages results in the actions of everyday life.

We focus our new approach on developing intuitive intelligence through increased understanding of and skill in visual communication. It is estimated

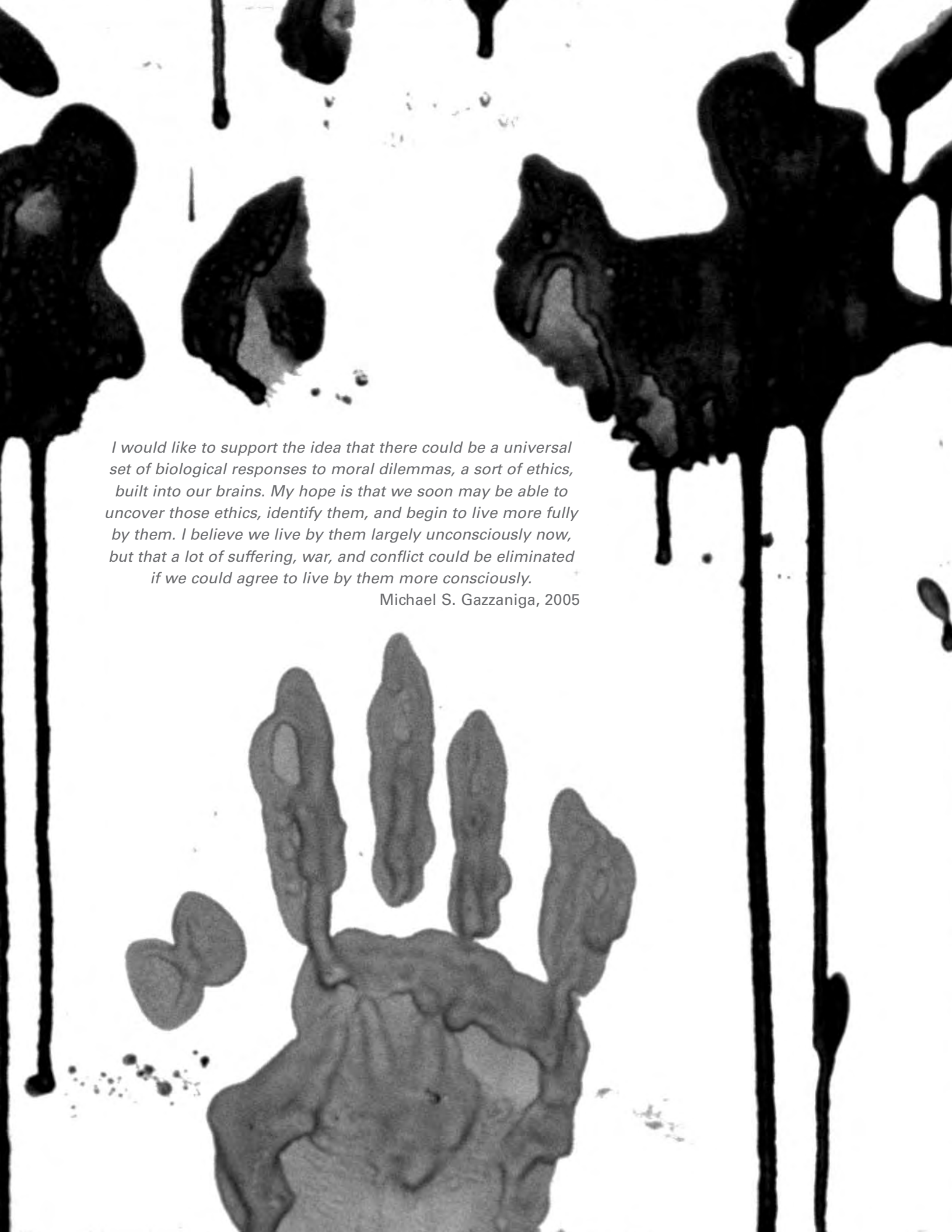
that more than 75% of the information our brains process is visual. Obviously, when we see with our eyes, we communicate visually. When we read words on a printed page, watch a sitcom on television, interact with an Internet site, take pictures at a birthday party, notice a look on someone's face, or remember what a friend looks like, we communicate visually. When we write, type, draw, paint, film, or photograph, we communicate visually. One of the discoverers of DNA, Sir Francis Crick, chose visual perception as the path for subsequent study of what makes us human. We also know that the blind develop vast visual systems within their minds. Yet most communication schools emphasize writing with words. Most colleges and universities stress verbal mastery with only peripheral attention to visual mastery.

We do not advocate lessening the commitment to learning how to write well as a foundation for good communication in any field of study. We do advocate balancing the commitment to words with a commitment not only to the visual but also to cultivating each individual's potential for balanced and holistic learning, thinking, problem solving, communicating, decision making, and doing. To do otherwise keeps us anchored in the past, while all around us whirl multidimensional media driven largely by profit motives with little regard for consequences to life on this earth.

Visual communication is a core function of the human organism and its interactions with other entities. We want you to understand how ingrained habits of seeing, knowing, creating, and behaving limit potential for living full, satisfying, and socially responsible lives. We want you to learn how you can improve your thinking and creative problem-solving processes through conscious perception of natural and mediated stimuli and through conscious creation of visual messages grounded in awareness of the reciprocity of life. We want you to learn how to use your whole mind — verbal and visual, rational and intuitive — to fully understand your self and the world in which you live and create.

The good news is that you CAN develop and cultivate your whole mind toward a holistic perspective that balances quantitative and qualitative issues that serve everyone, not just a small portion of the people of our world. The problems are serious and pervasive. The time for change is now. We believe there is hope for change. This book is filled with that hope.

R.W. and J.N., Eugene



I would like to support the idea that there could be a universal set of biological responses to moral dilemmas, a sort of ethics, built into our brains. My hope is that we soon may be able to uncover those ethics, identify them, and begin to live more fully by them. I believe we live by them largely unconsciously now, but that a lot of suffering, war, and conflict could be eliminated if we could agree to live by them more consciously.

Michael S. Gazzaniga, 2005

Figure I.1. The Circus, by Julianne Newton.

INTRODUCTION
The Integrative Mind

> *The brain is naturally integrative as it creates mind. By becoming conscious of its integrative modalities and by developing one's abilities to use those modalities on more sophisticated levels as complementary processes, one can achieve a state of dynamic cognitive balance that facilitates the highest order of cognitive creativity, problem solving, and performance in educational, professional, and life endeavors.*
>
> R.W.

This book is written using words to describe a part of the mind that knows *before and beyond* words. This powerful component of human knowing represents at least half of our cognitive abilities, including our visual, musical, psychological, and physiological abilities. We call these cognitive abilities *intuitive intelligences* because they are linked and differentiated by their unique ability to attain knowledge directly without words and without evidence of reason. These intuitive intelligences often use their primary knowledge on nonconscious levels to shape our perceptions of reality, solve problems, make decisions, and guide our behaviors before the conscious mind is activated.

Using words to describe cognitive processes that operate beyond words may seem like a contradiction. However, it is not. We attempt through words and images to provide a clear, working understanding of how you can fully develop and consciously integrate the processes of both your intuitive intelligences and your rational intelligences to create a state of Integrative Mind. This dynamically balanced state of mind will enhance your creativity and problem-solving abilities to work at more sophisticated levels of cognition and to accomplish more than by using only your rational abilities.

As you work through the book, stop to contemplate the images. Each image has been carefully selected and placed in order to communicate to you in ways that words cannot. Determining how each image complements and enhances words in the text is essential to understanding.

The study of visual communication has come full circle as an essential component of becoming an educated individual. During the 19th century, cultivating artistic ability was standard: People considered "educated" were "visually literate" in the sense that they could "read and write" a visual language. Often, that "language" was one or more of the fine or performing arts: A well-educated person could interpret and discuss works of art, as well as paint, or draw, or perform music or poetry — at least on basic levels. In today's world, however, college students usually take a minimum number of arts area courses as part of their undergraduate curricula. Few learn to use a visual medium with proficiency, and even fewer extend visual learning at graduate and postgraduate levels. Ironically, as visual education has been pushed to the periphery of the core curriculum in higher education, the need for visual literacy has grown exponentially.

One has only to glance at the contemporary environment to note the plethora of visual forms that we all must navigate in the course of daily life: road signs and maps, subway and bus schedules, video arcades, limitless Internet sites, blatant brand advertising on clothing, tattooed and pierced bodies, heavily stylized makeup and hair, all supported by 150+ channel television, Internet, and print media that blur entertainment, editorial, and advertising boundaries. It is estimated that the average person in the United States views some 3,000 to 4,000 media-generated images daily. Those images critically influence our lives and our culture. How does a person intelligently negotiate this environment through a word-based education that emphasizes skills that are neither visually nor intuitively sophisticated?

Visual Communication addresses this dilemma by introducing a holistic approach to education in order to integrate visual and verbal and intuitive and rational proficiencies. We wrote this book for a wide range of audiences in various disciplines operating at multiple levels of the educational system. As you read the book, you will follow a carefully planned course of study that teaches you to cultivate your intuitive and visual intelligences in tandem with traditional, verbally based rational intelligences. A major theme throughout the book is the role of the visual as the primary pathway to integrating intuitive and rational cognitive processes. The book integrates our original, holistic approach to learning and knowing with the work of other scholars. Thus, *Visual Communication* expands and bridges traditional approaches to the study of visual communication, liberal arts, and social and natural sciences by embracing intuitive and rational intelligences as equivalent, complementary, and mutually essential cognitive processes.

This integrative approach is called *Omniphasism,* which means "all in balance." Omniphasism teaches balanced, whole-mind cognition strategies by strengthening visual communication and other intuitive processing abilities. Another way to think of omniphasism is as *Integrative Mind Theory*.

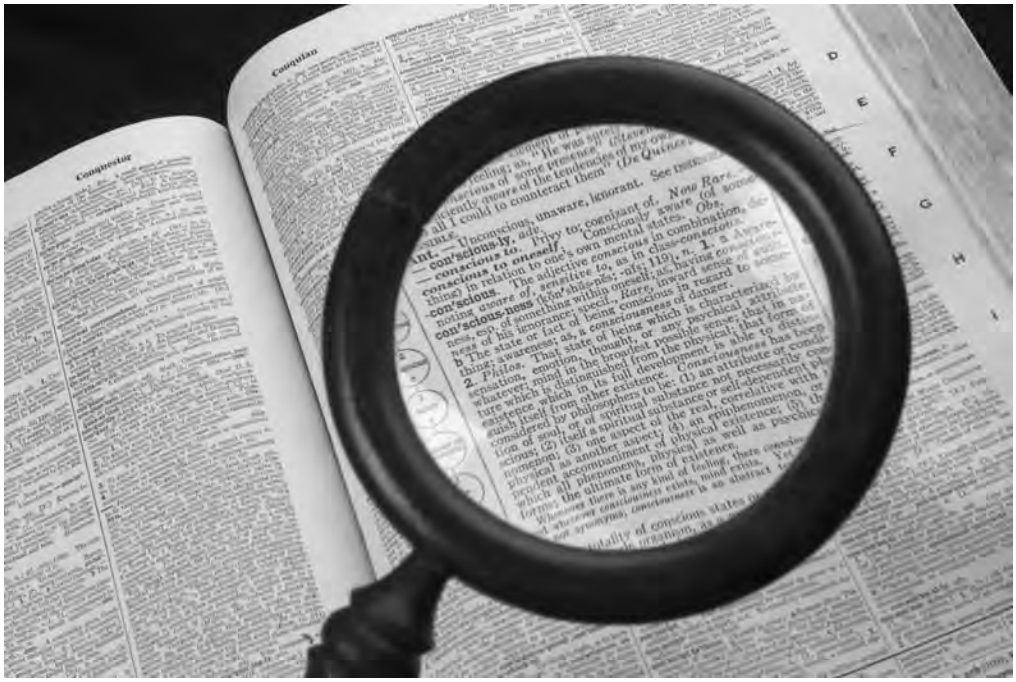


Figure I.2. Focusing on consciousness, by Rick Williams.

Clarifying Terms

Let's begin with the simple terms *visual* and *verbal*. Scholars and educators often use these two seemingly opposing terms to represent the two primary systems our brains use to process information into knowledge. In the 1970s Roger Sperry and Joseph Bogen introduced the concept of right- and left-brain hemisphere specialization to explain the same processes. In their model, the right brain was predominately visual and the left brain was predominately verbal. Since then neuroscientists have discovered that the brain is far more complex and integrated than the right/left, visual/verbal model implies. But Sperry and Bogen's basic concept of two primary cognitive-processing systems — one that analyzes information in rational, linear formats and one that synthesizes information in intuitive formats — has stood the test of time and science. The term *cognitive* simply refers to the process of knowing.

To clarify these ideas and facilitate applying dual processing systems to a broader arena of cognition and intelligence, we characterize the two primary cognitive modes in terms of the way they process information — either *rationally* through analysis (dividing something into component parts to understand it) or *intuitively* through synthesis (spontaneously relating different elements to create something new), rather than by their location in the brain. Thus, we call the *analytical* cognitive processes rational and the *synthesistic* cognitive processes intuitive. Each cognitive mode uses particular intelligences in specific ways to understand and respond to the world. These intelligences also can operate intuitively or rationally on basic cognitive levels. The result is an inte-

grated system of complementary cognitive processing modes — each equally significant to whole-mind knowing. We discuss the relationship of these various intelligences to Howard Gardner's multiple intelligence theory later in the book.

Understanding and developing integrated mind processes is fundamental to studying the visual, because visual intelligence is the primary intuitive intelligence. Further, all intelligences, whether predominantly intuitive or predominantly rational, have significant visual components that operate on both physical and cognitive levels. It is estimated that more than 75% of all information the brain receives is visual. Therefore, it is important to explore cognition and multiple intelligences to fully grasp how significant visual communication is to our understanding of the world around us and of ourselves, as well as the behavior that this understanding generates.

The term *cognition* refers to the brain processes we use in the act of knowing.

The term *intelligence* refers to the ability to use cognition (the processes of knowing) to understand and act on what one experiences. For instance, visual intelligence uses imagery we gather through our eyes, as well as imagery we create in the mind's eye, to make meaning, solve problems, make decisions, and determine actions. This process occurs on both conscious and nonconscious levels.

We use the word *intuitive* to describe those primary cognitive processes and intelligences that operate in a synthesistic manner at their most basic cognitive levels. *Intuitive intelligence* means the ability to attain knowledge directly through cognition without evidence of reason. In this sense, intuitive does not refer to extrasensory or paranormal perception. However, intuitive can refer to preconscious awareness or barely conscious perceptions that guide our behaviors toward certain decisions before we have rationally decided to make those decisions. For instance, if someone unexpectedly throws a ball at you, you may see and catch it using intuitive cognition before you have time to rationally, verbally analyze the situation.

Although we also use these processes as part of rational ways of knowing, their primary cognitive function is intuitive and therefore operates *before and beyond reason.* On the other hand, *rational* cognitive processes and intelligences use logic and reason to *analyze* information over time.

Synthesis means bringing disparate pieces of information together to form new understanding. *Analysis* means taking something apart to understand it. So, intuitive intelligences process information from a holistic, nonlinear perspective. To say it another way, intuitive processing often is *preconscious* and *prerational*, meaning it occurs before we are aware of it and before we can use it to make conscious decisions. It synthesizes information across space and time to initiate behavioral responses before the rational mind has had time to use the slower

process of analysis to receive, interpret, and respond to the information. When we use the term *consciousness* in this book, we mean a state of *awareness*. In other words, you are conscious of something when you are aware of it or thinking about it. Most often, consciousness involves words. The *nonconscious* mind, on the other hand, refers to the parts and processes of our minds of which we are not aware.

Preconscious processes bring information stored in the nonconscious mind into consciousness, either through the behavior they initiate or through processes of the conscious mind. Thus, the idea of preconscious information includes nonconscious information in the process of moving forward into consciousness.

Visual intelligence, as we use the term here, is a primary example of an intuitive intelligence that uses both nonconscious and preconscious information to initiate behavior. Our eyes move approximately 20 times every second to gather information. We neither are conscious of this movement nor can rationally consider and analyze every image that the eyes see. Nevertheless, selections of this visual information are received by the visual processing center of the brain, which first synthesizes visual stimuli on preconscious, nonrational levels before initiating a behavioral response. In other words, by the time we become conscious of what we are seeing, the intuitive mind has already synthesized the significant information and set a response into motion. Of course, if the rational mind becomes conscious of the information and behavior, it can then use the visual information to analyze what has been observed and adjust behavior as it deems necessary. Thus, visual cognition is equally significant to both intuitive and rational processes in an integrated and complementary format, and vice versa.

Listed below are several categories of intuitive intelligence, along with a brief explanation of each. Please note that in each category of intelligence we emphasize a strong, common visual component. That visual component does not diminish the other properties of the intelligence; however, it does allow us to consider and understand intuitive intelligence as a whole from a visual cognitive perspective. The organization below draws in part from Gardner's theory of multiple intelligences and Ann Marie Barry's theory of visual intelligence. We discuss both of these theories in detail as we work through the book. The purpose of *Visual Communication* is to extend these and other theories with our own original work through a model for developing an integrated mind.

- *Visual Intelligence*

The ability to observe, understand, and respond to images, light, symbols, shapes, patterns, colors, contrast, composition, and balance.
May involve physical sight, mind's eye, meditations, metaphorical imagery, imagination, drawing, photography, and gestalt comprehension and response.

•*Musical Intelligence*

The ability to hear and understand pitch, rhythm, timbre, and the emotional power and complex organization of music. May involve physical hearing, mind's ear, mind's eye, musical instruments, imagination, voice, and emotional and physical responses.

•*Psychological Intelligence*

The ability to know, understand, and respond to a detailed awareness of one's self and others. May involve sense perceptions; emotions; imagination; visualization; nonconscious mind and memory; dreams; physical, mental, and emotional relationships with self and others; and gestalt comprehension and response.

•*Physiological Intelligence*

The ability to know, understand, and respond to one's body and its relationship to the self, to others, and to objects. May involve visual and spatial awareness, physical movement, coordination, sense perceptions, emotions, nonconscious mind and memory, meditations, dreams, and gestalt comprehension and response.

All of us are familiar with such rational intelligences as mathematical and linguistic ways of knowing and communicating. We use them every day to name, categorize, count, and logically explain our activities and conscious thought processes. We spend most of our school years learning to read, write, and work mathematical equations — to use our rational intelligences.

We also all use such intuitive intelligences as visual, musical, psychological, and bodily kinesthetic ways of knowing thousands of times everyday. We use them so much, in fact, that we take them for granted. Because most of us are born with the ability to see, hear, and move, we assume that these intuitive abilities develop without need for the intensive formal training or practice that we give our rational intelligences. To some extent, they do develop on their own, without conscious attention. However, we have much to gain if we recognize, develop, and nurture our intuitive abilities beyond the rudimentary levels that enable us to function on basic levels in everyday life.

Not all intuitive cognition is nonconscious or preconscious. Visual memory, for example, can be brought to consciousness and integrated with our rational processes to help us make informed decisions consciously, or it can be deeply embedded in the emotional systems so that we become aware only of the intense feeling that nonconscious visual memories generate. Seeking information in our preconscious minds for guidance in rational decision making can add a cognitively balanced perspective to our experiences and our behavior.

Two active ways to access the preconscious, intuitive mind include meditation — sometimes called active imagination or visualization — and dreams. The first creative assignment that follows chapter 1 asks you to use an ancient technique of visualization. You will work with dreams in creative 9.

Underscoring a Key Point

Before going further, we need to make clear that we are talking about two different, yet integrated, cognitive-processing systems — one rationally dominant and one intuitively dominant — in one brain. Both our intuitive and rational cognitive systems, though operationally different, are integrated and operate together all of the time. Although a particular intelligence does not work alone, it may be dominant for a given task or process. For instance, the rational, mathematical mind might be dominant when we are balancing checkbooks, though the intuitive mind might clue us to the fact that something is wrong with our figures, even when they seem to add up. The intuitive mind might dominate while we draw or dance, but we need the rational mind to study and learn new dance steps or drawing techniques. Learning to use the complementary, integrative nature of cognition in conscious, intentional ways to enhance intelligence and creativity is a primary focus of this book.

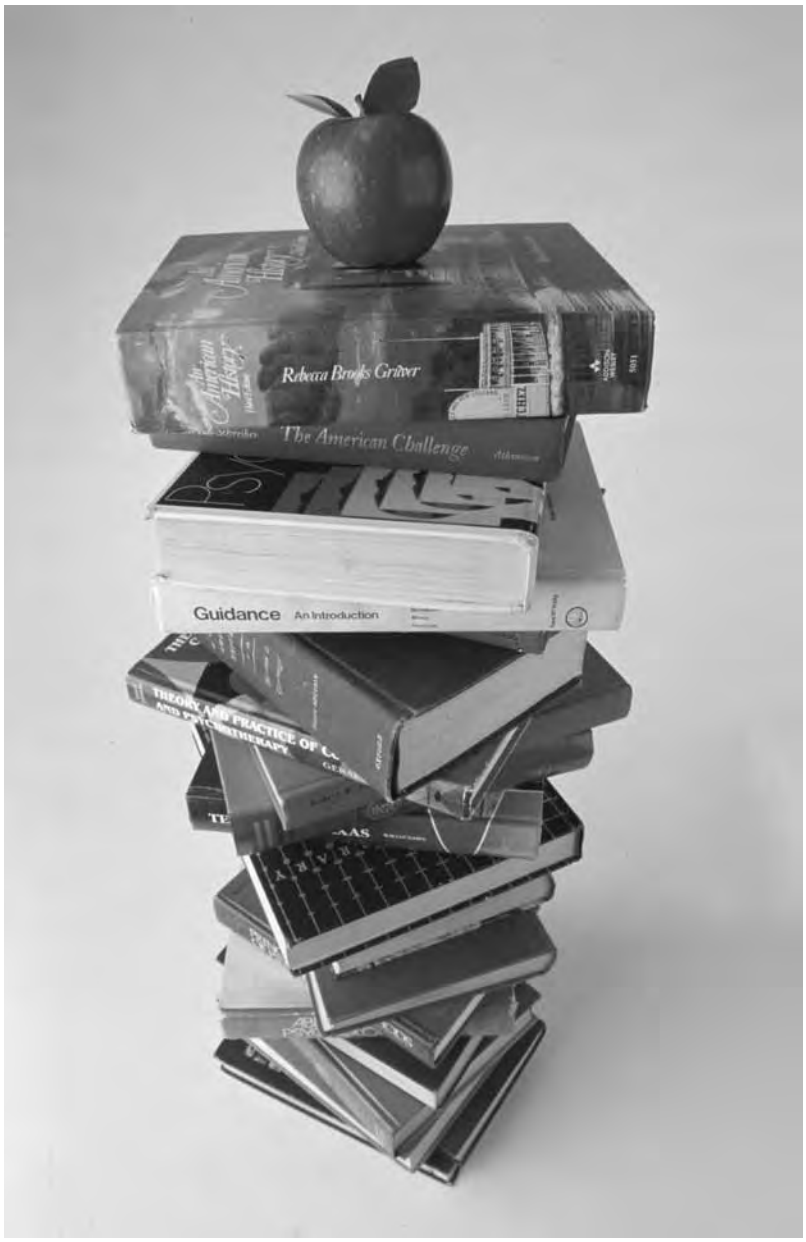


Figure I.3. One type of knowledge source, by Rick Williams.

The problem today with this integrative-mind scenario is that we live in a culture that has become so rationally biased that our intuitive systems remain underdeveloped and operate primarily on basic, nonconscious levels. Yet they influence both our conscious decision making and our actions. Because our educational, scientific, economic, political, and cultural systems do not focus on or

emphasize the intuitive mind, few of us have developed a significant, much less sophisticated, ability to recognize and use our intuitive intelligences. This is not to say that intuitive intelligences have gone unnoticed or unused by all. Many sophisticated executives in major corporations, and particularly in advertising and media, have recently learned that practicing visualization and other intuitively centered techniques improves creativity, problem solving, and decision making and thus enhances productivity. But this has not been incorporated into our educational system or our overall culture on a broad scale.

The very fact that you, as an individual within a society, have been taught so little about your intuitive intelligences is itself a testimony to the rational bias of our culture. This bias against the development and nurture of our intuitive intelligences suppresses and oppresses the very cognitive processes that bring creativity, problem-solving abilities, deeper meaning, quality, compassion, and an integrated spirit to the facts and dogma of our lives and communities.

This book is written in words about ways of knowing that operate beyond words to influence and guide our lives. We have organized the reading so that the book flows between theory and practice, and between rational processing and intuitive creating. Chapters 1 to 6 integrate our own work with theories in neurobiology, psychology, education, neuropsychology, and visual and media literacy. This provides both historical and contemporary support and context for various aspects of the omniphasic model of intuitive and rational intelligence and their relationship to visual literacy. Chapters 7 to 11 add new dimensions to traditional approaches to visual and media literacy by introducing and applying omniphasic, integrative-mind techniques. Chapters 12 to 15 illustrate how the media use intuitive communication techniques and offer suggestions about how you can use omniphasic techniques to overcome media manipulations and to create socially responsible visual messages for mass and personal media.

This book teaches you how to use your intuitive intelligences, especially the visual component of those intelligences, as equal and complementary to your rational knowing processes. In this book, you will explore both facts and theory, from a primarily visual perspective, to help your rational mind understand the power and significance of its intuitive complement. You also will work though a set of creative assignments to become more aware of your intuitive abilities, to enhance them, and to integrate them with your rational abilities. In the process, you will expand your cognitive abilities to help you find new solutions to old problems in ways that enhance both meaning and quality of life. You will be well on your way to becoming an excellent visual communicator — one who can both interpret and create visual messages for the 21st-century world.

PART I.
VISION AND INTELLIGENCE
Understanding Intelligence as Intuitive and Rational

Part I integrates our new ideas with established theories in neurobiology, psychology, education, neuropsychology, and visual and media literacy. This provides both historical and contemporary support and context for various aspects of the omniphasic model of intuitive and rational intelligence and their relationship to visual literacy.

Figure 1.1. Sitting Bull holding peace pipe, by D. F. Barry, 1885, Bismarck, Dakota. Photographic print on cabinet card, courtesy of the Library of Congress Prints & Photographs Division, LC-USZ62-111147.

CHAPTER ONE

Seeking Dynamic Balance: The Shaman, The Scientist, and the Theologian

> *Let us put our minds together and see what life we can make for our children.*
>
> — Sitting Bull, Lakota Sioux, 1877

Figure 1.2. Standing Holy, Sitting Bull's Daughter, by D. F. Barry, 1885, Bismarck, Dakota. Photographic print on cabinet card, courtesy of the Library of the Congress Prints and Photographs Division, LC-USZ62-117642.

She-Bear: The Power of Integrating Visual and Verbal Communication

Let us tell you a story, a parable yet, as it was given to us by Bear Faces the Wind. In this story of the soul, Bear Faces the Wind tells the story of She-Bear to a theology professor and to a scientist.

"Hidden in a den deep beneath the frozen ground in the mountains, She-Bear awakens from her winter sleep and gives birth to two tiny cubs. The bear cubs are blind, hairless, somewhat shapeless creatures weighing less than two pounds each. As the spring sun melts the snow, remaking the fertile world outside, She-Bear uses her tongue to lick her shapeless cubs into the image of bears. Thus, when the melted snow has filled the rivers and the forest floor has flowered, the cubs will be ready to face the outside world in the fullness of their Bearness."

The scientist, considering the meaning of the story, focuses on the idea of bear cubs being shapeless and ponders the idea of how the mother can lick them into the image of a bear. Questioning this, the scientist follows She-Bear to her den the next fall. Later, when the bear is comfortably hibernating, the scientist returns to make a peephole in the den so he can apply scientific observation to the formation process after the cubs are born. Of course, being aware that scientific observations are always challenged, the scientist increases the reliability by following 10 bears and digging 10 peepholes to expand the sample size. To

increase confidence further, the scientist adds five more observers to the team. Naturally, in the spring, the team records that in 10 of 10 dens the cubs, though hairless, apparently blind and somewhat shapeless at birth, do in fact look like small bears and, though the mother does lick them, this does not literally change their shape or image. Thus, armed with quantitative scientific evidence, they denounce the story as inaccurate, and therefore invalid, and not to be taken seriously.

Thinking the scientist has missed the mark and that there must be some deeper meaning to the story, the theologian looks to the book of wisdom that she reveres as the word of God and finds the idea of discipline and spiritual growth in a passage about sparing the rod and spoiling the child. Obviously, the theologian challenges, this story is a parable and means that the mother disciplines the cubs until they conform to the image that she has picked out for them as bear cubs.

Bear Faces the Wind, who has told the story from generation to generation, smiles at the scientist and the theologian and tells them, "You are both completely correct and you are both completely wrong."

"Of course," says Bear Faces the Wind, "the cubs physically look like baby bears when they are born. That is what they are. It is good though to confirm that they are hairless, blind, and shapeless." The scientist smiles. But Bear Faces the Wind continues, "Yet what they look like on the outside is not all that the story is about."

"And," says the Bear Faces the Wind, "the story is a parable, and the mother bear will certainly use her own form of discipline to teach the cubs what she wants them to know." The theologian smiles. Bear Faces the Wind continues, "But using physical force to make the cubs in her own image is not the whole point of the story either."

Bear Faces the Wind explains, "This is a story of the soul that teaches both the Rational and the Intuitive mind. It does this by using facts as symbols or metaphors for reality that exists beyond the facts alone."

"For example, it is within the cave," continues Bear Faces the Wind, "that She-Bear, who represents the mature, life-giving, nurturing, feminine spirit within each of us, begins the preparation for the cubs to enter the outside world. Thus, at the beginning of the story, the idea of shaping the cubs has to do with shaping their inner selves, not their actual physical shape.

"Also, bears use their tongues to both lick and heal wounds and to show affection. So, the idea of licking is a symbol of protection and nurturing of the immature until their own inner sense of themselves as bears matures. Because

of this shaping, the cubs are able to protect and care for themselves inside before they move into the outer world."

This story, *She-Bear*, is significant to us as individuals and as a society. It clearly illustrates the advantage of holistic application of the rational and the intuitive intelligences of our minds. In addition to using our logical, rational intelligences to establish certain facts about bear cubs, the story draws on our symbolic intuitive intelligences to look beyond the facts. Seeking this deeper meaning is the key to developing creativity and values that ensure quality of life for the individual and, subsequently, for the relationships the individual develops within the community.

The story also parallels and symbolizes the way that mass communication, driven by rationally biased, educational, social, economic, and governmental systems, can effectively ignore the whole story to perpetuate their own, limited, linear, hegemonic systems upon a half-literate society. In this way, they are able to significantly shape our values and, therefore, our behaviors, relationships, and lives.

This symbolic story is significant to the teaching of visual literacy, art, journalism, mass communication, and other disciplines because media messages produced by symbolic prose or visual craft have the power to communicate instantaneously and profoundly to both the conscious and the nonconscious, the rational and intuitive intelligences. Thus, they leave lasting impressions that shape our lives on levels of which we are not always consciously aware.

And these deeply felt intuitive metaphors can be, and are, misinterpreted and misused by gifted, intuitively literate communicators in these same mass communication, educational, social, economic, and government systems. The visual communicators behind these powerful systems use the media to produce and disseminate intuitive image metaphors that are constructed to persuade and manipulate our preconscious cognitive states. Subsequently, these intuitive messages, operating from our preconscious memory, form preconscious biases that guide our problem-solving and decision-making processes. This is the most popular, effective, and powerful art of our time. It shapes our lives in specific ways that exalt the intent of the systems but rarely foster the quality of our being. They teach us to focus our energy and our behavior to use physical, external rewards to nurture and satisfy our deepest inner needs for human understanding and relationships. Of course, this produces an overwhelming quantity of objects in our lives but very little quality in the form of relationships or a sense of community integrity.

Because our educational systems have focused on rational intelligences rather than intuitive intelligences, intelligences that are powerful and equally as complex and effective as our rational intelligences, we are left as intuitive illiterates, vulnerable to sophisticated media manipulations. The use of sophisticated, intuitive communication techniques establishes the mass media as the educators and exploiters of the intuitive intelligences. As such they are positioned to unduly influence our perceptions of reality, our values, and thus our lives and our culture. The film series *The Matrix* suggests what a continuation of this model might look like in the future.

Only when, as did Bear Faces the Wind, we integrate the intelligences of our whole minds to shape our lives and our culture do we embrace the balance that reaps the benefits of the whole story, so that human beings enjoy both appropriate quantity and optimum quality of life.

If you want to become fully educated, both in theory and practice, you must move beyond the limited educational model, which emphasizes mathematical and linguistic intelligence, to study and apply the full capacity of your intelligence. You must move beyond rational bias toward a balanced cognitive perspective that develops and nurtures your intuitive intelligences as equally significant to your rational intelligences. Omniphasism proposes one way to begin making this critical transformation individually and as a culture.

A Theory of Integrative Mind

Omniphasism, which means "all in balance," is a holistic approach Rick Williams developed in1995 to cultivate and use the varied abilities of the mind. Before we explore the omniphasic theory in detail, it will be helpful to get on even ground in terms of the meanings of basic concepts and words that inform the theory. Tables 1, 2, and 3 at the end of this chapter outline the key terms, ideas and basic theory underlying the view that rational and intuitive intelligences are complementary cognitive processes at work in the integrative mind. We explore the ideas and concepts further in the next few chapters. It is critical to the understanding of omniphasism that you also develop and practice your intuitive abilities. The creative exercises that follow each chapter of this book are designed specifically to help you recognize, practice, and develop your intuitive intelligences in concert with your rational abilities. They will help you understand and apply the theory that is explained in each chapter. For that reason it is important to do the exercises in order, after you have read the chapter. You may discover your own rational bias as you do the creative exercises. This means that you may find some resistance to doing them, or may initially think they are too simple, or that you are not getting enough out of them. Do not let that discourage or stop you. You have spent most of your school life developing your rational abilities in the rational realm of logic, mathematics, and linguistics. If you spend the required time to complete all of these exercis-

es, we feel certain you will have a new and deep appreciation of your intuitive intelligences. Not only will you become visually and intuitively literate but you will be better prepared to apply your whole mind to creatively solve problems and make advantageous decisions for your work and life. The first creative exercise that follows provides a relaxing, intuitively oriented break from the rationally dominant theoretical ideas in the chapter. Enjoy.

Figure 1.3. Winter, by Rick Williams.

Table 1. Key Terms

Cognition (W)*
: The act or process of knowing, including awareness and judgment, or a product of this act.

Knowing (W)
: Having information or understanding.

Intelligence (W)
: The ability to learn or understand and apply knowledge advantageously.

Process (W)
: A continuing activity or function marked by gradual changes that often proceed toward a particular result.

Rational (W)
: Relating to, based on, or agreeable to reason.

Intuition (W)
: Attaining direct knowledge or cognition without evident rational thought or inference.

Rational Intelligence (A)**
: The ability to learn or understand and apply knowledge through a process relating to, based on, or agreeable to reason.

Intuitive Intelligence (A)
: The ability to learn or understand and apply knowledge directly and nonconsciously without the intervention of conscious rational processes

Rational Cognitive Process (A)
: A knowing activity that is related to, based on, or agreeable to reason.

Intuitive Cognitive Process (A)
: A knowing activity based on attaining direct knowledge or cognition without evident rational thought or inference.

Omni (W)
: All

Phase (W)
: To adjust until balance is achieved.

Omniphasism (A) / Integrated Mind Theory
: All in balance. An interdisciplinary theory that integrates the rational and sintuitive intelligences toward balanced, whole-mind knowing activity, which leads to balanced lives and cultural systems.

**W = from Merriam-Webster's Dictionary (10th Ed., 1993)*
***A = Authors' Extension*

Table 2. Key Ideas

One

• Human intuitive and rational intelligences complement one another as equal and parallel cognitive processes that operate independently but are integrated.

Two

• Intuitive and rational intelligences are equally complex and equally significant to the balanced, whole-brain functions of a human being.

Three

• A significant bias exists against the development and maintenance of intuitive intelligences throughout our scientific, economic, educational, and cultural systems.

Four

• The rational bias has created an experiential and psychological intuitive intelligence void in our cultures that promotes intuitive illiteracy and leaves us unbalanced, lacking, and longing for completion as whole beings.

Five

• Intuitive illiteracy has opened the door for the media to be used as the educational/exploitation system for intuitive intelligences. The power of the media to persuade and shape lives and cultures lies in their ability to develop intuitive communication processes that effectively fill this intuitive void.

Six

• The development of a holistic educational model that embraces a balanced curriculum, developing both intuitive and rational intelligences as equivalent and complementary, has the potential to enhance creative problem-solving and decision-making abilities and prepare a more balanced, fully educated, self-determining individual, less susceptible to manipulative media influences and better prepared to apply classroom experiences to life experiences in ways that generate balance within the individual and thus within the cultural systems subsequently developed.

Table 3.
Primary Intuitive and Rational Cognitive Processes*

This table briefly describes some of the basic cognitive processes used by the intuitive and rational intelligence systems. The definitions highlight complementary characteristics of, and differences among, the main processing functions of the two primary cognitive systems. This list, selected from the Bogen and Ornstein list in chapter 6, is not meant to be an exhaustive account of all cognitive processes or all intelligences. Primary intuitive intelligences are discussed in detail in chapter 6.

Intuitive Cognitive Processes	Rational Cognitive Processes
Visual/Spatial - Direct knowing based on seeing, either with the eyes or with mental vision.	**Verbal** - Knowing based on how to use words to name, define, describe, label, and categorize.
Intuitive - Direct knowledge or cognition without evident rational thought or inference.	**Rational** - Knowledge that is related to, based on, or agreeable to reason.
Holistic - Knowledge of whole things working in groups or as systems; perceiving patterns and relationships.	**Linear** - Thinking in terms of linked ideas, one thought directly following another.
Synthesistic - Knowledge gained through awareness of the interdependent relationships or connections among things; putting things together to form wholes.	**Analytic** - Knowledge gained by separating things into component parts or constituent elements; figuring out step by step.
Analogic - Knowledge gained by seeing likenesses between things; understanding metaphoric relationships.	**Abstract** - Knowledge gained by taking out a small bit of information and using it to represent the whole.
Timeless - Knowing without regard or awareness of time.	**Temporal** - Knowing in relationship to time; sequencing based on time.
Primal- - Knowledge of a primary, fundamental, firsthand nature; often based on perception.	**Derivative** - Knowledge derived from something primary or basic. Often based on conceptualization.

**List drawn in part from Bogen,1975, p. 25, and Ornstein, 1972, p. 37.*

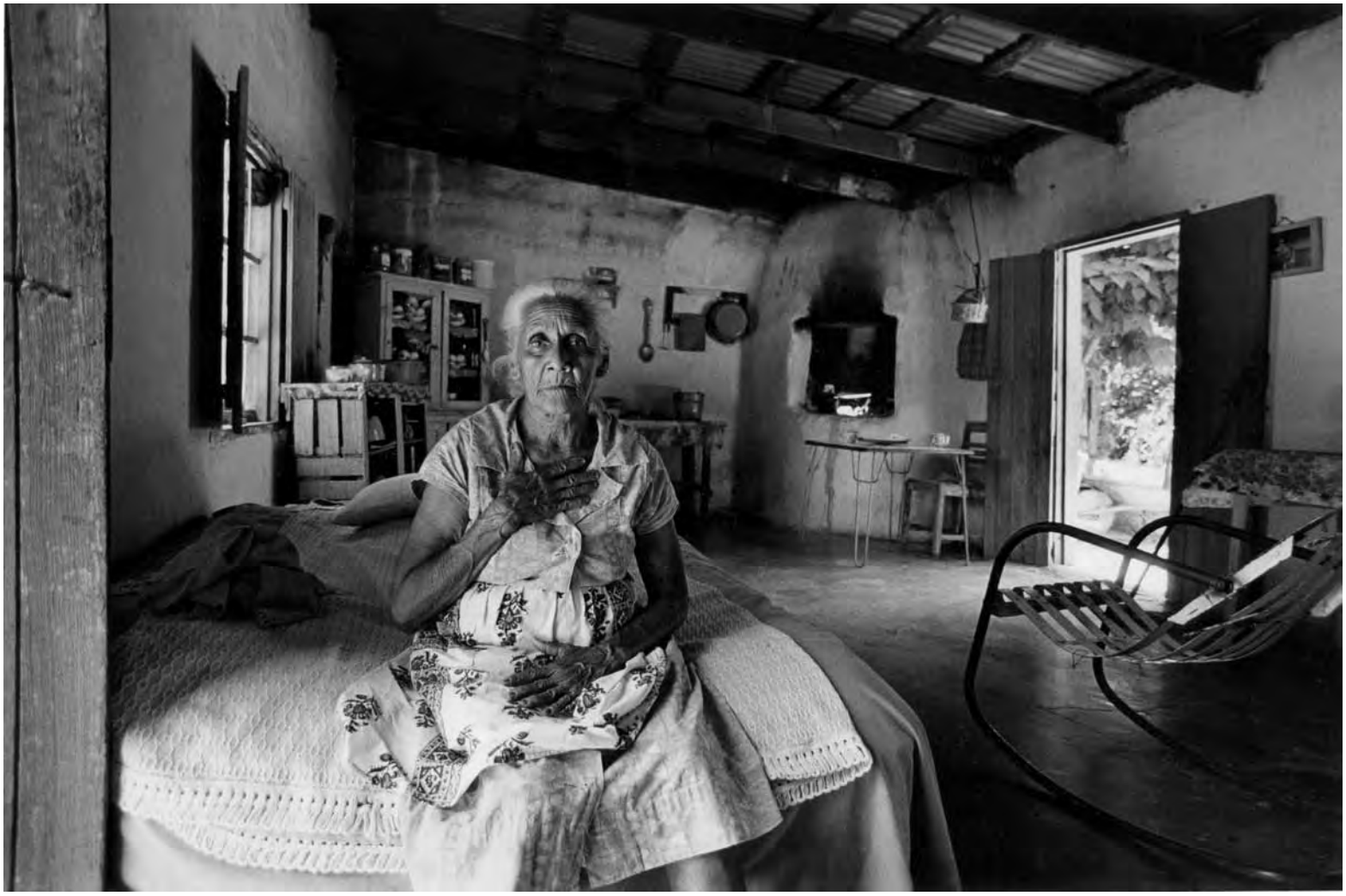


Figure I.4. Eloina's Mother, by Julianne Newton.