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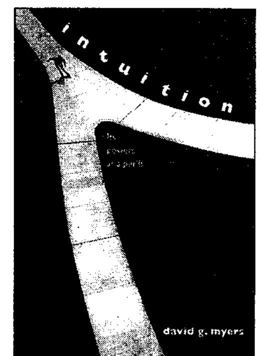
# Intuition Bound




**Intuition: Its Powers and Perils**
by David G. Myers

New Haven, CT: Yale University Press, 2003. 322 pp.
ISBN 0-300-09531-7. $24.95

*Review by Joachim Krueger*

Intuition is a familiar phenomenon in mental life. Often we know things, or we think we know them, because they seem to be self-evident. Intuitions impress themselves on us much like visual perceptions do. We can tell black from white and cats from dogs without much reflection. Indeed, sensory perception is intuitive, and intuition is, in a way, perceptual. Surely, sense perception can go awry, as any student of psychology soon finds out. Sometimes parallel lines seem to converge and objects of equal size seem to differ—but once the entertainment value of the perceptual illusions has worn thin, the attentive student learns two important lessons. First, the mind–

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brain system works hard to provide reliable and accurate sense perception. By sparing us the effort to compute perceptions by acts of will, the system gives us a sense that perception springs directly from external stimulation. Though mistaken, this sense of direct perception is useful, for little is to be gained from being aware of the cortical operations that give rise to conscious experience. Second, the system works well most of the time. To realize how superbly the unconscious mind creates a world of reliable conscious experience, it is necessary to force it to break down. This is not an easy task. To arrange a visual display that creates an illusory perception requires considerable ingenuity.

In a complex world, populated by allies, enemies, and a growing range of human artifacts, intuition is asked to master an ever greater range of tasks. We need to predict and explain our own behavior and the behavior of others, choose wisely between alternatives, and integrate information stemming from different sources and coming in different formats. The behavior of humans and the properties of their artifacts present new challenges that intuitive perception cannot meet as efficiently as one might wish. Compared with primary sensory information, social information is often noisy, and we make many judgments under considerable uncertainty. Three decades of research on social cognition have documented many of the ways in which these judgments depart systematically from normative principles as described, for example, by statistical models or economic theories of choice.

## A Gift From the Greeks

In his highly readable and engaging new book, David Myers reviews much of the evidence for the fallibility of intuition, and one is left with the impression that the human capacity to reason rationally is grossly inadequate. The litany of errors, biases, fallacies, and illusions is nothing but terrifying. Myers's stated goal is more ambitious, however. He sets out to evaluate human intuition by separating its benefits from its liabilities. His premise is that intuition is the child of perception. Without it, we would be rudderless in a world that often demands quick judgment and action. But as it turns out, this bow to the powers of intuition is a brief, almost prefatory gesture.

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Like Gaul, Myers's book is divided into three parts. The first part surveys the powers of intuition, the indispensable workings of the nonconscious mind, and their salutary contributions to expert judgment and creative insight. The second part addresses the perils of intuition. According to Myers, we should worry because "with remarkable ease, we form and sustain false beliefs" (pp. 67–68). What makes these false beliefs nefarious is that they ride in the Trojan Horse of "our mind's efficient shortcuts. They parallel our perceptual intuitions, which generally work but sometimes run amok" (p. 68). In the third part, the hatch in the horse's belly opens wide, and the intuitions run wild. From popular beliefs about sports to beliefs about the validity of psychic predictions, reliance on intuition disables our ability to evade deception and to see the truth. By the end of this wild ride, the epilogal reassurance that "the new cognitive science underlying this book is fundamentally constructive" (p. 247) rings hollow. How does it aim "not to destroy but to fortify our rationality, to sharpen our thinking, to deepen our wisdom" (p. 247)? Like the Dutch wresting dry land from the North Sea, Freud hoped that the ego might push back the id. In this tradition, Myers suggests that disciplined, analytic, and conceptual thought may replace intuition whenever such replacement is needed. How analytic thought might actually achieve this goal remains somewhat unclear.

Unlike Gaul then, the three parts of this book do not quite form a coherent whole. The ultimate message remains a pessimistic one. Intuition in social and other uncertain environments is to be deeply distrusted. As a consequence, the metaphor of visual illusions misses the mark. If visual illusions lay bare the ways in which perception usually works well, errors in social judgment might arguably do the same. Indeed, over the last decade, a growing literature has shown just that. More often than not, judgmental shortcuts (i.e., heuristics) yield good or at least satisfactory results. Much of this work has been inspired by proponents of the "bounded rationality" perspective on reasoning, such as Brunswik, Gigerenzer, and Simon. Indeed, the architects of the heuristics-and-biases paradigm, Kahneman and Tversky, foresaw the benefits of intuition, but chose not to document them empirically. Curiously, Myers does not present the work of the bounded rationalists as a competing perspective, but as being part of the heuristics-and-biases paradigm. It is not without irony that this strategy itself bears the mark of a "confirmation bias."

## Two Systems of Reasoning

Because not all judgments are made intuitively, it is fair to inquire into the alternatives. Recently, many investigators have found it useful to distinguish between two systems of reasoning (e.g., Kahneman & Frederick, 2002; Sloman, 1996). They consider System I to be intuitive, associationist, and experiential. The chief benefit of this system is that it performs parallel operations automatically and that it yields passable results much of the time. System II is considered to be rational, analytical, and rule based. Its benefit is that it can bring coherence to competing intuitive percepts. But System II is a limited resource. It works sequentially, slowly, and with some effort. If,

as Myers emphasizes, the shortcomings of System I are many, the burden on System II is great. Myers's focus on the frailties of the intuitive system and the strengths of the analytic system is incomplete because System II is not without its own shortcomings. As the two systems are far from being well-matched complements of each other, each has unique strengths and weaknesses. Figure 1 shows a sampling of judgmental phenomena arranged to represent four distinctive scenarios.

Many of the cases in which both systems succeed involve the routinization of complex behaviors. Learning to drive a car or to play chess, for example, requires considerable time and effort. With practice, however, intuition takes over, and the mental resources of the analytic system can be directed elsewhere. Cases in which both systems fail, typically involve tasks so unusual that the mind can resort to neither acquired nor inherited experience to solve them. For example, people are notoriously poor judges of geometric progression. Would you have thought that $5^5$ is greater than 3,000? A great deal of work in the field of social cognition explores cases in which only intuitive reasoning, but not analytic reasoning, fails. Most of these tasks require people to use more than one source of information and to combine them in a statistically defensible way. Even with training and incentives, the success of the analytic system is only modest, and, as noted above, the failure of the intuitive system in this domain is far from complete. Many of its judgments are adaptive in the long run. The intuitive preference for confirmatory testing strategies is a case in point.

The great strength of the intuitive system is its ability to detect patterns in the flow of experience and events of emotional importance. Myers cites research on implicit learning as an apt example. People can detect covariation among variables and even learn the grammar of a made-up language without being aware of their success. Exceptions must surely be noted. The emotional trigger is sometimes pulled too easily, and sometimes patterns are detected where none exist—but what can the analytic system accomplish here? Sufferers of panic attacks have a low threshold to detect threats. Although they can be trained not to overreact, their rational insights into the silliness of their responses does little to hasten their recovery. Many athletes and fans fervently believe that a basketball player who has made a couple of shots in a row has a "hot hand." Statistical analyses using the data from an entire season can expose this belief as a myth, but how are people supposed to detect the absence of a pattern in the short-run experiences available to them?

Like Myers's book, the present sketch of the benefits and risks inherent in both systems of thought shortcuts a further complication. Inasmuch as analytic reasoning is identified with the adherence to normative principles, the impression is created that normative theories speak with one voice. Alas, distinct and even competing schools exist in statistics as well as in economics. Tom may be a fine rationalist in the Bayesian sense, whereas Ron is good in the frequentist sense. To each other, however, their judgments appear to be utterly irrational, misguided by faulty premises and intuitions. Moreover, some choices that most laypeople recognize as desirable stand as inexplicable departures from rational norms. In social dilemmas, such as the famous Prisoner's Dilemma, many human participants cooperate. As a group, they carry away more money than they would if they all heeded the call of rationality to defection. Given their success, and the moral value of their choice, it would be cynical to brand people as being thoughtless. Sometimes untutored behavior puts us ahead of the game.

| Analytic System | Intuitive System: Succeeds | Intuitive System: Fails |
|---|---|---|
| Succeeds | Motor and social skills | Information integration |
| Fails | Detection of patterns and emotionally significant events | "Weird" tasks |

*Figure 1.* A sampling of judgmental phenomena to represent four distinctive scenarios comparing the strengths and weaknesses of the intuitive and analytic systems.

## Serenity Now

Myers concludes his Introduction with Niebuhr's famous prayer, which calls for the wisdom to distinguish that which must be accepted from that which can be challenged. As of now, the prayer remains largely unanswered. Exhorting people to think harder and more analytically is more likely to yield greater frustration than enlightenment. The analytic system works best when it helps build and consolidate adaptive intuitions, such as healthy habits and profitable skills. It is not very effective at policing judgments once intuitive processes come into play. So how do we know when to suspend our own judgments and to delegate the job to experts or statistical routines (Swets, Dawes, & Monahan, 2000)? Ideally, science and education (and perhaps God) will help us make the call, but let us hope that they will not lead us to the paralysis of excessive self-doubt. Like spontaneity, intuition has its time and its place. As Obiwan Kenobi said to Luke Skywalker "May the force be with you." ❑

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# Relationship as Healing

**Dimensions of Empathic Therapy**
by Peter R. Breggin, Ginger Breggin, and Fred Bemak
New York: Springer, 2002. 197 pp. ISBN 0-8261-1513-6. $32.95 paperback

*Review by Arthur C. Bohart*

*Dimensions of Empathic Therapy* is not primarily about empathy. Rather, its "metapurpose" is to present an alternative to the dominant medical model of current mental health practice. The book is generally against psychiatric diagnosis, pathologizing, use of medication, and psychotherapies that are primarily technological. It is also generally against hierarchical power relationships where mental health professionals, operating from a presumed posture of greater expertise, decide for clients what is good for them, and in some cases use legitimate power to impose solutions (e.g., through level systems in hospitals and through threats that if families do not comply with treatment strategies, the families may lose their children). The book is "for" the primacy of empathic and authentic relationships as the core of healing. One author, Wolowitz, notes that on the one side, therapy is "short-term diagnostically oriented, and manualized with prescribed techniques and goals. . . . On the other side . . . [there] is an ever growing number of psychotherapists and counselors who believe that there is no substitute for an authentic relationship" (p. 13). In addition, the book emphasizes the primacy of clients' choice, self-direction, and a belief in their self-healing capacities.

Proponents of technological treatments, the medical model, and of medication will bristle at the book's implication that their approaches are not as "humane" as the approaches described in this book. They will claim that the use of medication to control symptoms is humane; and proponents of empirically supported treatments (the prototypical exemplars of manualized treatments) have repeatedly argued that there is nothing humane about using treatments that have no specific empirical support. Both will also argue that they value treating clients empathically.

The book, however, is getting at a difference between two fundamental visions of the nature of psychopathology and of the nature of psychological healing. In the medical model, psychopathology results from "mistakes in the machinery," either biological or psychological (e.g., conditioning or schematic information-processing dysfunctions). The mental health professional is an expert who "knows best" (backed up by scientific research on medication and on empirically supported treatments) what the patient needs. The relationship between professional and patient is fundamentally hierarchical. The alternative view, stressed in this book, is that psychological problems have meaning. Smith says, "Psychiatrists usually don't state it explicitly . . . but they view symptoms as meaningless and purposeless. . . . In contrast, the empathic listener receives and holds the patient's communications . . . assuming them to be meaningful even when the meanings are not readily apparent" (p. 7). Symptoms therefore are not merely errors. Accordingly, empathy and authenticity are not merely relationship qualities to be "provided" by the expert physician/psychotherapist for supportive purposes while he or she diagnoses and treats using medication or psychotherapeutic technology. Rather, they are the core of healing itself. For instance, McCready discusses an innovative program for working with patients with serious psychiatric problems without the use of drugs which relies on empathy, choice, and positive connection. McCready says, "we do not so much 'treat' or even 'heal' patients. We create an environment in which they may heal" (p. 68).

Are these two points of view fundamentally incompatible? According to at least one author in this book they are. Smith, a psychiatrist, argues that the models are based on diametrically opposite assumptions. He notes that,

> When typical psychiatrists listen to patients, they are listening for symptoms. For example, if a patient says, "I've been so depressed I can't sleep," the doctor thinks to himself, "depressed: could be depression (with psychotic features?), or just dysthymia, or possibly bipolar." He also will begin thinking of antidepressants . . . He will likely ask the patient some questions along this line of thinking: "How long have you been depressed?" "Have you ever been manic?" . . . This particular line of questioning may be in line with the patient's own train of thoughts, but most likely not. . . . In contrast, a doctor working within the empathic-relational model would not likely impose a line of thinking on the

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