

What is Intuition?

Many people have asked me what I mean when I say that one of my major strengths in jury selection (and scientific research, parenting, etc.) is my intuition. They seem puzzled that a rational scientist, trained to test hypotheses in the search for knowledge, would trust a gut feeling. So right off the bat, I want to say that most of my trial consulting work proceeds via a logical, step-by-step analysis. Yet I am often inspired with flashes of intuition, insights such as what drove a jurors' decision-making process, which I test scientifically and analyze logically, when possible. For other insights, I test the intuition itself, which I discuss below. First things first – what is intuition?

The Meyers-Briggs Type Indicator (MBTI), which is based on Carl Jung's work, classifies people according to how they prefer to take in information. (You may be familiar with this test, as it is administered to 2 million Americans every year.) People who prefer sensing information tend to describe themselves as practical while those who prefer intuiting information describe themselves as innovative.

This dimension of personality presents the widest gap between people, causing more misunderstandings and frustration than any other personality difference. Keep in mind that we all use both functions, sensing and intuiting, but we have an innate preference for one over the other. We all fall somewhere along a spectrum, between these two extremes.

	Sensing-Types	Intuiting-Types
Percent of Population	75%	25%
Percent of Attorneys	50%	50%
Pay attention to	Facts and details	Relationships, meaning
See the Forest or the Trees	Trees	Forest
Describe Themselves as	Practical	Innovative
Tend to be	Down-to-Earth, Sensible	Imaginative, Creative
Time, live in the	Here and Now	Future
Most comfortable with	Familiar	New and different
Speak with words that are	Literal, w/ facts & examples	Metaphors & analogies
Communication Style	Listen until others finish	Finish others' sentences
Regard language as a	Tool to convey thoughts	Way to express oneself
Child-rearing emphasis	Develop one's usefulness	Develop one's imagination
Enjoy reading	Non-fiction	Fiction
Preferred Words	Concrete, straightforward	Abstract, complex sentence
Strength in Business	Getting things done	Envisioning new products
Proficiency	Efficiently using skills	Learning new skills
Thinking Style	Linear	Non-linear, Intuitive Jumps
Attitudes to reduce crime	Prison	Social Programs
Politics	Conservative	Liberal
College Majors	Business, engineering, sci.	Psych., phil., soc., literature
Education Level	Graduate degree less likely	Grad degree more likely
Occupations	Manager, nurse, teacher	Professor, clergy, journalist

Sensing Types

Sensing types like facts and they tend to accurately remember things . They are concerned with their experiences, the details of *actual* reality as perceived by their five senses. When they talk to people, they want to know about their past experiences. They tend to be down-to-earth and realistic. Sensors prefer to take things step-by-step. They prefer concrete ideas and words like practical, no-nonsense and sensible.

Intuiting Types

Intuiting types focus on patterns, relationships and possibilities. They tend to live in the future, imagining what could be. They enjoy metaphors, poetry and daydreaming. They are more likely to jump from one project to another, as they become engrossed with something new.

Intuition builds on sensory data, completing a whole picture with the elements that are physically, emotionally or imaginatively (dreams, fantasies, memories) sensed. Carl Jung said “Sense-perception tells us that something *is*, but it does not tell us what it is.” Sensing perceives isolated things while intuition perceives the complete whole. Intuition is an organizing principal, a way of structuring information in the unconscious.

“The intuitive sometimes finds complex ideas coming to him as a complete whole, unable to explain how he knew. These visions, intuitions, or hunches may show up in any realm – technology, sciences, mathematics, philosophy, the arts, or one’s social life.” *Please Understand Me: Character & Temperament Types*, David Keirse & Marilyn Bates.

Sensing Intuition Continuum

Perception functions along a continuum, between sensing and intuition. You gain clarity in one at the expense of the other at a given moment. For example, when listening to a symphony, you can either focus your attention on hearing individual instruments or the entire piece at once to grasp the emotion, the message in the music. The function of sensing focuses on the elements of music, the instruments, while the function of intuition combines the sensory information with pre-existing information in the unconscious to find relationships and complete a whole, to find meaning in the details.

Intuitive People

While 25% of Americans are classified as intuitive by the Meyers-Briggs Type Indicator (MBTI), about half of all attorneys are intuitive. Most research scientists prefer sensing to intuition, though our most famous scientists tend to be intuitive. This is because intuitive people think in metaphors, non-linearly, and are able to synthesize facts into new paradigms, new ways of seeing the world. Many have attributed their success to intuition.

Here is what Albert Einstein had to say about intuition:

The really valuable thing is intuition. The intellect has little to do on the road to discovery. There comes a leap in consciousness, call it intuition or what you will, and the solution comes to you and you don't know how or why.

There is no logical way to the discovery of these elemental laws. There is only the way of intuition, which is helped by a feeling for the order lying behind the appearance.

The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift.

Jonas Salk said *intuition will tell the thinking mind where to look next.*

Issac Asimov, speculating about *flashes of intuition*, said:

I suspect that very few significant discoveries are made by the pure technique of voluntary thought; I suspect that voluntary thought may possibly prepare the ground (if even that) but that the final thought, the real inspiration, comes when thinking is under involuntary control.

Carl Jung believed that intuition is deeply seated in the unconscious, beyond the subliminal. He proposed that intuition arises from a “collective unconscious,” which is biologically inherited from our ancestors and available to all of humanity. This controversial idea is not generally accepted by psychologists because it is untested. (Science only answers the questions that we ask, which is influenced by funding, the scientists’ own biases and what we know how to test.) However, neurobiologists have recently found that some “memories” are genetically inherited (discussed below).

Wolfgang Pauli, the renowned physicist, believed in Carl Jung’s idea of a collective unconscious. He also wrote a paper about another revered scientist’s source of intuition entitled: *The Influence of Archetypal Ideas on the Scientific Theories of Kepler*. Recent neurobiological research also lends support to Jung’s collective unconscious, which is discussed below.

Although intuitive personality types have greater access to their intuition, we have all experienced it to some degree, such as when you:

perceive words as a whole, looking primarily at the first and last letters;

anticipate the future, such as when you hear footsteps in a hallway and realize someone is about to enter a room;

see the big picture or underlying pattern; and

feel someone staring intently at you from across a room.

Intuition as an Unconscious Logical Process

Neurobiologists have discovered that the subconscious mind automatically recognizes patterns via neural “combinatorial coding.” This combinatorial coding system is similar

to DNA, which uses 4 chemical inputs (ACGT) to sequence each individual person. In 2004, a Nobel Prize was awarded to scientists who studied combinatorial coding in the olfactory system. They found that slight changes in the chemical structure of a molecule change which combination of dendritic receptors on a neuron are activated. Octanol smells like oranges but octanoic acid, which is chemically very similar, smells like sweat.

There are 100 billion neurons in our nervous system and *each one* is capable of holding its own database. That is because neurons have hundreds to thousands of dendritic inputs which are used in combination to store memories – unimaginably large capacities *per neuron*. If each neuron contained only 26 inputs, it could store millions of memories. If you are hearing Carl Sagan’s voice saying “billions and billions,” think bigger.

The mental storage capacity of our brains is beyond description. We cannot possibly pay attention to this much information, so it is stored and accessed automatically in our unconscious mind. Neurobiologists believe that intuition is an elimination program that runs through our entire nervous system, analyzing learned and genetically inherited (ex. fear of snakes) databases. Combinatorial coding deactivates associations of cells that are not useful for a given input, and they, in turn, send out signals to other groups to deactivate. The result is that within half a second, we intuitively react to our environment.

It’s like a power outage. Imagine you are high up in an apartment overlooking the Chicago skyline at 8pm on Saturday, March 28, 2008. It’s “Lights Out for Earth Hour,” when 200 cities around the world shut down nonessential power to bring attention to global warming. You watch darkness sweep across the city, blocks at a time. Suddenly there are only a few lights visible, which catch your attention. This is how your brain finds a memory or genetically inherited “memory” amongst all the information stored in your neurons.

Intuition and Reason

Skeptics point out that selective memory skews our assessment of intuition’s accuracy and that, statistically, we can expect a “miracle” every month. So it is important to keep this in mind and remain grounded in our perceptions. People often mistake “intuition” for wishful thinking, associations from past experiences and conscious thinking. It is important to analyze where the “intuition” might be originating, especially while you are just learning how to recognize it.

My Understanding of Intuition

Although intuitive personality types have a preference for intuition, it is a learned intelligence that anyone can develop. It requires practice, self-awareness and a “quiet mind.” And not all intuitive personality types are especially intuitive, just because they prefer it to sensing information.

There are several levels of intuition. We all experience intuition at the most basic levels of pattern recognition and “a-ha!” moments, when we suddenly understand something.

My experiences are consistent with those whom I quoted. Intuition is a sudden knowing that is not a result of conscious effort. These flashes of insight usually are related to things that I have been recently thinking about, i.e., where I have directed my intention.

Intuition - Pattern Recognition

The simplest, most easily understood, is how we recognize patterns, such as the words with jumbled letters. Our subconscious automatically recognizes the words. But this is not a “thinking” process. The subconscious does not think; it runs pattern recognition programs without us having to work at it and it works fast. This first level of intuition is what neurobiologists are describing and everybody does this constantly.

Intuition – the Light Bulb

We have all experienced the next level of intuition, when we are consciously struggling with a problem, trying to fit puzzle pieces together, when suddenly we see the whole picture and we say “a-ha!” The answer bubbles out of the subconscious mind as a symbol, an image or a metaphor, sometimes as a sound, a feeling, a bodily sensation or a smell. Intuition is when the light bulb turns on and you suddenly know you have found the answer. After you “get it,” it may seem obvious, but it wasn’t obvious when you first thought about it.

I have not found any research on this type of intuition. I am not sure if it is combinatorial coding. The sudden insight happens lightening fast, not a gradually increasing sense of certainty, yet it takes effort because the conscious mind is struggling to send a thought, a trigger, to the subconscious. The conscious and subconscious are working together in this level of intuition.

Intuition as a More Complete Understanding of a Logical Concept

The next level of intuition is most often experienced by intuitive personality types. It’s when a complex idea is suddenly understood, all at once. It feels like the previously described light bulb switching on, that “a-ha” moment, that is accompanied by a strong feeling of certainty. Intuition connects the knowledge dots and fills in the rest of the picture, resulting in a much more comprehensive understanding.

The concept that mentally gels together can be incredibly intricate and multidimensional. I sometimes feel like I can mentally walk through a 3-dimensional model of a system, examining it from any angle, from the inside out. Simple natural and human processes, such as fluid dynamics and traffic patterns, are the easiest to model.

For example, I am constantly analyzing the flow of traffic, which is similar to turbulence in pipes. When traffic reaches a critical capacity flow rates will change very quickly and minor disruptions, such as merging lanes, will cause slowdowns that ripple down the freeway like a wave, approaching oncoming cars. The more vehicles per mile that are on the road, the further out the traffic jam begins. When traffic lightens up, the wave will dissipate.

More complex systems, like climate change, human behavior and anything that has an inherent structure or is governed by known principles, can be intuitively understood, very quickly, all at once. This is how I think and understand whatever it is that interests me. When I'm watching a juror, I focus all of my attention on modeling their individual reaction to the case and their effect on the jury's group dynamics.

People are predictable in how they take in and process information, hence typology. They will tell themselves a story about your case that is the most accessible, given their life experiences, attitudes and personality, which is what we learn about during voir dire.

This intuitive approach is much more predictive of verdict than just plugging the factual dots into a statistical model. I don't simply calculate a probability based on answers to questions and demographics, I model their *thinking* and *behavior*, i.e., their personal decision-making process and how they participate in the deliberations, factoring in what I observe, including emotional reactions to the attorneys and to other jurors' statements.

Feeling Intuition

Just as I feel varying levels of certainty about my memory, I trust intuitions that come with a calm confidence and I verify ideas that feel less certain. This marker of confidence took time to learn and is the result of paying attention to how I felt about a given intuition and then verifying it, when possible. Feeling personality types have an easier time with this than the more logical types, who need to understand the underlying mechanism. Feeling types analyze the accuracy of intuition with a statistical approach, associating a feeling to a given probability of certainty.

Intuition Applied to Jury Selection

During jury selection with a highly regarded trial attorney, I had a very strong, sudden intuition that Juror #7 would be the foreperson. I just suddenly knew it, when I was *not* calculating probabilities or watching body language or group dynamics. I was absolutely certain. The attorney argued that she was an improbable foreperson and he felt so passionately, that there was no way this woman would lead the jury, that he promised me a steak and lobster dinner if I was right. (It's funny, how delightful that meal tasted!)

Sometimes intuitions can be logically explained, sort of like reverse-engineering. This is how I described intuitive flashes in my peer-reviewed articles when I was a research scientist. But sometimes there is no rational explanation.

There were some other unusual intuitive insights during that trial which impressed him, such as when I warned him that opposing counsel would pass on their second peremptory strike. When opposing counsel's voice inflected, softening, while questioning a pro-plaintiff juror, I suddenly knew, without a doubt, that he would pass. I think that he decided to risk accepting the jury in order to catch up on peremptories, since we passed on our first strike. The strength of this intuition, given the lack of a rational explanation, surprised me.

I consider it to be evidence of subconscious perception. I must have taken in other information, yet I was not consciously aware of any. Intuition cannot always be reverse-engineered, which is why it is so important to develop a marker of confidence.

Reverse-Engineering

As a scientist, I am most comfortable logically analyzing information to reach a conclusion. So when I have an intuitive leap, I work hard to reverse-engineer it and explain it logically, partly in an effort to understand how intuition works, but also so that I am absolutely certain about my results. If analysis backs intuition, then it's a pretty sure thing. A trial consultant who has analytical skills and is also intuitive is a great resource.