Chapter 5

Solving the Impossible: How to Harness Three Diverse Intuitions in Teams

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Contents

Introduction

This chapter elaborates upon three diverse types of intuitions integrated in our thinking. The use of these intuitions has been mentioned by distinguished inventors, successful business leaders, and domain-specific experts. The chapter outlines

why it is important to understand and integrate these three types of intuitions when envisioning, innovating, or making complex decisions. Harnessing the full potential of intuition allows us to be more alert to respond to the challenges of our swiftly transforming environment.

The turbulent time around us calls for novel solutions. At the same time, in decision-making we have the tendency to emphasize reasoning over intuition. We try to squeeze all the juices out of System 2 while eliminating and amputating System 1 with a justification of the biasing effects it has. Furthermore, we are busy developing artificial intelligence to increase the amount of calculation for the benefit of our complex problems and decision-making—instead of looking at the research outcomes in studies of creative minds, which underline the role of intuition in high-cognition mental operations. It is true that from a historical perspective, the methods for reasoning have been indispensable especially when eliminating biases of thought, such as magical thinking and superstition. *But the point is not that intuition is prone to biases, instead that there is a lack of discernment skill while acquiring and evaluating intuitive information (Raami, 2015).* Every single type of information is prone to biases; intuition is not an exception. If our reasoning is not adequate, we end up with false information. To get accurate and reliable information while reasoning, we need to know that all the parameters involved are bulletproof and that the chain of reasoning is impeccable (Tart, 2009). This is seldom the case with the current problems.

For the past 10 years I have been researching intuition in creative practices. My continuous fascination has been why the concept of intuition remains too ambiguous to capture, and why the practical hands-on methods of intuition remain difficult to apply. Why does intuition slip out of our hands like soap? Why does it surprise us just when we thought that we finally understood how to utilize it?

This chapter brings together my 10 years of research in the fields of designers' creative processes, reinforced with recent interviews with Finnish artists, experts, inventors, and business leaders (Raami, 2016). These include discussions with seven successful artists, five domain-specific experts such as world-famous neurosurgeons, group discussions with 10 distinguished inventors, one of them holding 300 patents, as well as three deep interviews of exceptional business leaders, one of them constructing capital worth billions. Based on these perspectives, I have outlined the three most important types of intuitions, which form the basis of exceeding the known and of exceptional pioneering.

The Human Mind Is Equipped for Brilliance

The human brain has built-in ingenious abilities to invent novelties, to solve impossibilities, and to envision the future. Benefiting from this potential is essential, as we are surrounded by tremendously difficult problems. In short, we need more

people who specialise in solving the impossible.* However, from the perspective of intuition, impossible problems do not exist. There is only inability to see the solution. Typically, we are unable to see the solution due to our restricted points of view. The reason why we do not see, as well as the methods how we could see, are both embedded in the human mind.

The way the human brain works can be compared to a snowy hill. When we slide down the slope for the first time, we can freely choose where to slide. While sliding, we leave a track behind. Then, when we slide down the second time, it is easiest to slide down in the already existing track. The human brain functions in a similar way. When we think or do something for the first time, we have an intact territory. As soon as we start thinking, a connection forms. Neurons that fire together, wire together.† Next time, the brain automatically chooses the most energy efficient and quickest route, which is the existing connection. (Pascual-Leone, n.d.) This process is the basis of our learning, as well as heuristics and automation. We practice something, and it becomes a well-wired connection in our brain. From the intuitive point of view there is a downside. When we have learned something extremely well, we are so deep in the track that the only thing we can see is the snowy wall. The hill disappears out of sight, or in fact even further, outside of our current understanding. Therefore, when the solutions for our impossible problems exist, they are unreachable to our understanding or even to our imagination.

The good news is that we can learn from the practices of the individuals who can make this leap and surpass the current understanding. Furthermore, we can benefit from the research outcomes of various fields of knowledge constructing understanding of the potential embedded in the human mind.

We Can Learn from Exceptional Inventors and Thinkers

Research made on Nobel Laureates and distinguished inventors reveals to us certain distinctive qualities and patterns of knowing which emerge when solving the impossible. People working with so-called "wicked problem solving" (Rittel & Webber, 1973) and with novel and radical innovation constantly report that their intuitive processes are profoundly based in a highly personal type of intuition (Keller, 1983; Larsson, 2002; Raami, 2015, 2018).

One of the most illuminating examples in history is the life and work of Nobel Laureate Barbara McClintock, who is the only woman in history awarded with an undivided Nobel Prize in Medicine. Her way of knowing and constructing scientific knowledge was so exceptional that she was heavily questioned by her peers, and

* Poet Theodore Roethke has said: "What we need is more people who specialize in the impossible."

† Neuropsychologist Donald Hebb first used this phrase in 1949 to describe how pathways in the brain are formed and reinforced through repetition.

hence quit all academic publishing for years. McClintock's crystallized observation on her personal working methods serves us a valuable insight related to surpassing the current level of knowledge. Typically, when we work with a complex problem or decision, we work *with* a problem: acquire information, classify, analyse, and acquire additional information. McClintock's way of working was the opposite. When faced with an unsolvable problem, she started to *work on herself*. Something in her was obstructing her from understanding the problem and from integrating the information and seeing the solution, rather than in the problem itself. She described being in the heart of her innovation and scientific work as being in a state of connectedness. Descriptions like these are present also with other Nobel Laureates and inventors (Keller, 1983; Holton, 1974; Larsson, 2001; Shavinina et al., 2004; Shavinina, 2009).

In other words, when we face a seemingly impossible problem, we are unable to see the solution. We obstruct the way ourselves due to the biological and psychological way in which our human mind works. Yet, we do not often understand *how* we obstruct the way. We often recognise the problems, but we are limiting our view by focusing *only* on the problem-solving. To solve the problem, we need to start working with ourselves. More precisely, the only thing we need to do is to remove ourselves from the way.

Further, when facing an impossible problem, we cannot find the solution with reason alone. The solution seems impossible since perhaps we cannot see the core question, or the solution is beyond our current logical understanding. We need to exceed the known. Therefore, we need intuitive information and integration of nonlinear ways of knowing when acquiring information, that is, various ways of intentional intuiting. In other words, often intuition appears as a ludicrous thought, the logic of which has been dared to be thought out thoroughly. Normally, instead of thinking these thoughts through, it is typical for us to turn away from a thought that otherwise overly challenges our preconceived notions. This is logical and natural since we have mental and emotional barriers restricting us (Mälkki, 2011; Mälkki & Raami, 2019). Therefore, in leadership, we need to learn how to tolerate seemingly unreasonable thoughts.

Instead of One Single Intuition, We All Have a Pool of Intuitions

The human brain is an elegant and ingenious organ with two joint system operations: System 1, intuition, and System 2, reasoning (Kahneman & Tversky, 1982). The nature of the human brain is inherently intuitive, and it occupies a majority of our thinking. System 1 processes several orders of magnitude more information than System 2 (Dijksterhuis et al., 2005; Zimmerman, 1989). In decision-making and creative work, it is always a question of integrating these two types of thinking. Often, intuition is considered as a monolithic phenomenon, yet System 1 is a pool of

varying nonconscious processes founded on diverse knowledge bases (Glöckner & Witteman, 2010). Currently, cognitive science and psychology sees intuition as a continuum (Hogarth, 2001) consisting of varying instincts and evolution-based intuitions and domain-specific intuitions like heuristics and experience-based automated tasks.

The challenge is that intuitive experiences that are a part of inventing do not fit the current continuum of intuition, but rather represent an ambiguous territory of unmapped intuition. Therefore, the continuum of intuition is not a sufficient enough model to explain extraordinary intuitive experiences, which seem to have a remarkable role when inventing novelties. Therefore, when harnessing intuition for the use of personal and team decision-making and inventing, we need to be aware of the variety of intuitions and their role in intuiting. For example, not mixing the three "I" s—insight, intuition, and instinct (Shefy & Sadler-Smith, 2004). But in everyday life, while talking about intuition, it is more than obvious that we make constant confusions and end up referring to different types of intuitions without noticing it. (Raami, 2015, 2018).

An additional challenge is, due to our 300-year-long history of European culture and science, we think we can grasp intuitive experiences through natural language and verifiable observations. Therefore, the challenge of harnessing intuition cannot be solved "by rationalising the essential intuitive source of creative knowledge, but rather by *studying the way science proceeds when it is successful at being creative"* (Laughlin, 1997, p. 22).

We Can Acquire Specific Information through Intuition

Intuition is not just a way to receive information through moments of sudden flashes and revelations. Instead, it is a two-way channel (Bastick 2003). If we can receive intuitive information, we can acquire it through intentional intuiting. Intentional intuition allows us to access the untapped potential of the human mind. Some research states that through intuition we can acquire almost any information. Often we restrict the way ourselves. The most severe obstacle is our own mind in the form of restrictions and biases. (Kautz, 2005; Peirce, 2013; Raami, 2015).

When acquiring intuitive information, the demand for accuracy and reliability of information becomes integral. It is no use to acquire information if the reliability is unobtainable. According to Monsay (1997), the type of intuition is directly related to its reliability. She states that physical intuition is most likely reliable while sensible intuition rooted in sensing and common sense usually creates errors based on naïve experiences. In general, practice and trust appear to be crucial steps when interpreting intuitive signals and the reliability of intuition (Nadel, 2006). Davis-Floyd and Davis (1997) argue that the most essential components for testing reliability seem to be the personal and inner *feeling of connectedness as an embodied and spiritual aspect*. In other words, the reliability is related to the matrix of physical,

emotional, and spiritual connectedness (Davis-Floyd & Davis, 1997). Further, intuition needs to be discerned from biases like imagination, magical thinking, storytelling, and such, otherwise we cannot build knowledge on it (Raami, 2015). Many individuals perceive signals like embodied sensations, absence of strong emotions, or experiences of serendipity and synchronicity, which work as confirmations of intuition (Raami, 2015; Mälkki & Raami, 2019). Of course, when creating, it is beneficial to integrate intuition and imagination since they feed each other. However, while making critical decisions, it may be a fatal error to rely on information based on biases and false associations.

The recent interviews in the autumn of 2018 with distinguished inventors started to outline the territory of intuition related to inventing. The coincidences and experiences inventors described while using intuition in their process of inventing were aligned with my previous interviews with business leaders. Elements like exceptional timing, unbelievable opportunities, strange synchronicity, and serendipity as well as unconventional recognition of meaningful weak signals and associations were repeatedly at the fore (Raami, 2016). Further, the inventors reported unconventional and remarkably similar stories of utilizing a special, highly personal way of intuiting. While inventing, they all described utilizing a similar kind of mental space as the basis of their thinking. For example, one inventor, an 80-year-old male who holds about 300 patents, describes:

> I have a white canvas. I turn my gaze upstairs. At the beginning, there is always an empty canvas, which afterwards starts to fill up. I can have a question in mind, to which the answer then appears early in the morning hours. I wake up at 2 a.m. and work until 6 a.m. The answer may be a text or a drawing, direct knowledge or a more emotional sensation. Sometimes the answer appears spontaneously, at other times I form questions and the canvas responds. The issue can be worded differently upon the canvas or otherwise moulded to another form. I can never erase the canvas, but every night I receive a new white canvas.

Similar experiences recur in the stories described by other interviewed distinguished inventors. However, this type of direct knowing experience is opposite from the perspective often seen in studies of expertise. Neither current psychology nor cognitive science recognize such a basis of knowledge, and it is perhaps excluded from the Western idea of a man. We have an illusion that problems are solved with hard work, analysis, and reasoning. It is true, that we need domain-specific expertise for integrating intuitive information to the existing practices. Many of these inventors report that when their domain-specific expertise has increased, they have been able to receive and apply more direct knowing information while making prototypes. Therefore, these two types of knowing are not exclusive but inclusive; they support each other. However, they are not equally credited. This is not made easier by the fact that our cultural comfort zone of handling intuition is limited due to personal,

cultural, and historical reasons (Mälkki, 2011). Especially with this direct knowing type of intuition, we are lacking the necessary vocabulary and the concepts are insufficient or nonexistent.

Another notable detail in the quotation is the difference between intuitive information and imagination: the inventor cannot erase or manipulate the information given. This is aligned with experiences reported by creative practitioners, since intuition and imagination are fundamentally different processes based on distinct knowledge bases (Davis-Floyd & Davis, 1997; Kautz, 2005; Raami, 2015). Imagination is adaptive; it has plasticity therefore you can easily manipulate the information in your mind. Often it comes jointly with emotions or wishes as guiding signals. Intuition instead resists manipulation and often comes jointly with the experience of emotional non-attachment (Kautz, 2005; Raami, 2015; Peirce, 2013). Further, intuitive information may take a form of multidimensional thought or clusters of information that seem to follow a logic of their own, while imagination is more prone to orchestrated association chains (Raami, 2015, 2016, 2018).

But this is not enough: we need to be alert to other biases too. We need to educate ourselves about different types of intuitions and their specific biases. Since the model presenting intuition as a continuum is insufficient to capture many of the highly intuitive experiences, we need to widen our perspective.

Integrating the Three Types of Intuitions Creates Fertile Ground for Invention

The complexity of intuition results from its adhering to different knowledge bases in various fields. Further, the current understanding of intuition as a monolithic phenomenon or a continuum consisting of manifold variables explicates only intuitions based on instincts, learning, and some types of expertise. However, these types of intuitions are not sufficient to capture intuitive processes related to exceptional expertise and radical innovating that can surpass the known, as described by the inventors (Holton, 1973; Keller, 1987; Larsson, 2001; Raami, 2015, 2016). Therefore, I suggest including *a third dimension of intuition,* which supplements the field, since together with the two other types of intuition it helps us understand the difficulties of integrating intuitive knowledge in practice.

The continuum of intuition can be illustrated as a triangle, where in one corner is our most primitive type of intuition based on evolution and instincts (Figure 5.1). It is the primate and bestial in us, and we cannot ignore it even though we would like to see ourselves as developed, educated, and rational beings (Mälkki, 2011). The bestial lives inside us due to our strong animal-based genetics. From the instinct-based intuition rises our primitive urges and drives—which are extremely beneficial when, for example, they help us support our daily life, such as well-being, survival, and nurturing. It also helps us take care of our offspring, live in a social setting, and access and utilize physical qualities like embodied cognition (Gigerenzer, 2007).

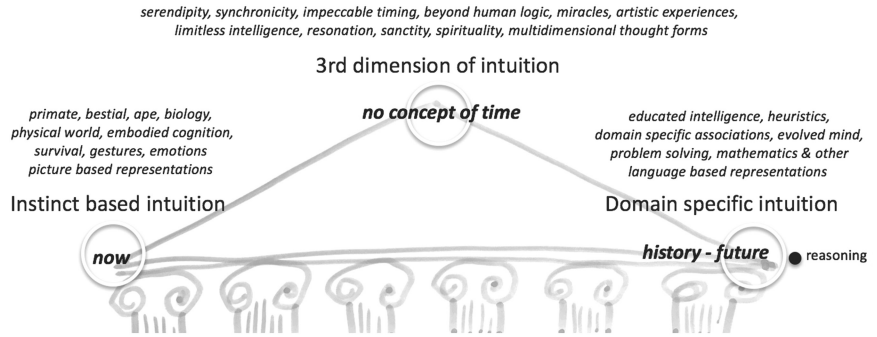

Figure 5.1 Three diverse types of intuitions and reasoning.

At the same time this type of intuition is mainly unreachable to our reasoning due to herd-based functions such as primitive attachments, surviving, mating, pecking order, fears, and clinging.

In another corner is the domain-specific intuition, which is the one typically mentioned in expertise studies (Bastick, 2003; Glöckner & Witteman, 2010). This type of intuition is distinctive for the educated mind benefitting from intuitive processes such as heuristics, pattern matching and recognition, associations of accumulated evidence, automated tasks, and construction of mental representations. The information of domain-specific intuition is usually derived from subconscious memory traces and combined with new information, mental representations, or comparison with exemplars, prototypes, or images (Bastick, 2003; Glöckner & Witteman, 2010; Monsay, 1997). This type of intuition is an integral part of our expertise.

Further, it has an important role in discerning intuitive information, which can be illustrated as an ability to combine the right dots leading to understanding and outlining the correct pattern (Lloyd-Meyer, 2007). On the other hand, the same intuition produces severe biases such as mental loops and ingrained, rigid thought patterns (Kahneman & Tversky, 1987). Could it be that this stagnation is one of our most severe barriers in accessing and integrating the other two types of intuitions?

The problem is that domain-specific intuition does not explain the most radical and visionary types of insights, those which exceed the domain and our current understanding. Therefore, it is not sufficient to explain processes of intuitive revelations. The inventors interviewed used descriptions like connecting to "*the limitless intelligence,*" or working in "*the upper floor workroom,*" or "*the upstairs office*" and linked these experiences with components such as serendipity, synchronicity, resonation, sanctity, or beyond human logic. They see this dimension as different from their domain-specific thinking. The inventors describe that while working in this dimension of intuitive knowing, everything is possible since for them it is the source of free, limitless information. A male inventor, age 78, describes:

> There are two realities, an upper and a lower one. I call them the upstairs office and the office of the mind. In the upstairs office, nothing is impossible. Sometimes I reach it in the moments between being asleep and awake, or while driving. There, it is possible to examine the same things from multiple different angles at the same time.

This type of knowledge basis has been labeled with various names depending on the field of knowledge. For example, Kautz (2005) calls it superconscious, Tart (2009) as the transpersonal realm, László (2009) refers to it as Akashic Record or the Akashic Chronicle, and Wilber (1997) uses the term atomic consciousness. The reason why I call it the third dimension of intuition is due to its intrinsic intertwining with the two other types of intuition: instinct-based and domain-specific intuitions. Most likely, due to these two other types of intuitions, we have difficulties in connecting and integrating the third dimension into our thinking capacity. These three intuitions are an inseparable part of our humanity; they intermingle endlessly, yet in fundamentally different ways since every one of them is embedded on entirely different knowledge bases.

Incoherence and Single-Lens Perspectives Are Indicators of Connection Flaws

An increase in incoherence and black-and-white thinking seems to be typical for our time. From the grassroot level to global affairs, an escalation of radical thoughts like populism can be observed. Could this be a result of our poor connection to intuitive faculties? Let's elaborate the idea a bit further. If our instinct-based intuition overrides rational thinking, we most likely end up over-reacting and making irrational emotion-based decisions. Could this lead to a power struggle and a situation where absurd and random arguments are considered more valid than the voice of experts? Moreover, if we deny the connection to the third dimension of intuition, could we end up explaining away genius ideas that simply do not fit into our current dogma?

Typically, we see and search for those perceptions which fit our worldview. When we educate our mind, we're able to examine and include other perspectives in our thinking too. However, if the perspective radically contradicts our own, accepting contradicting realities or points of view demands mental resilience and straining. However, when strong emotions are included, changing the perspective and maintaining contradicting views can become painful or impossible.

Per se, the perspectives of these three intuitions conflict radically with each other. This leads to blind spots and biased, hidebound thinking. Mental blocks are reactions to reject something that confronts our current understanding (Mälkki & Raami, 2019). When we ignore nonconscious processes they tend to have a stronger

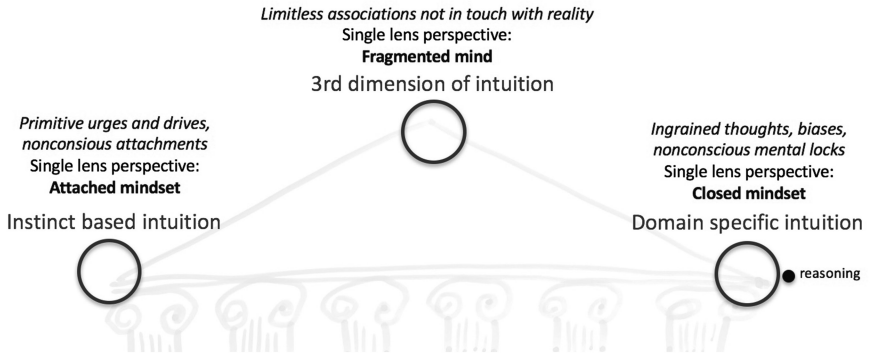

Figure 5.2 The different logics in three diverse intuitions and examples of their typical biases.

influence underneath (Mälkki, 2011). All of us have inalienable primitive drives affecting us subconsciously even though we assume we are open-minded and think logically. For example, in a case of a trauma, pressure, conflict, or a strong emotional bond, we easily end up being in a black-and-white perspective, losing the connection to the other two types of intuitions (Figure 5.2). This may lead to a situation where our confrontation, stagnation, and primitive urges effectively override our other senses and we use our reasoning only for inventing acceptable-sounding explanations for our irrational decisions. All of us have most likely experienced a situation in which we have let ourselves be drawn in and stuck to a single perspective, for example being infatuated with something, so that we only see that one perspective—even if reality would be revealed later to be very different.

Let's elaborate how these three intuitions differ from each other in a case of single-lens perspective. It is essential to see the obstacles which are otherwise hidden, and which sever our connection to the other intuitions. When our instinct-based intuition controls our decisions and actions, we lose the connection to our logical reasoning, hence our actions are over-reactive, strongly emotion-based, and unpredictable. The single-lens perspective results in *an attached mindset* which is defensive and incoherent, dominated by primitive urges and drives. A typical reaction could be something like, "no matter if my arguments are logical or not, I just need to quickly exit the situation and return to my emotional comfort zone, preferably maintaining the power over others" (Mälkki, 2011, 2019; Mälkki & Raami, 2019). Actions brought about by instinct-based intuition are a consequence of herd activity and are dependent on the herd and the individual's place within it.

A person strongly bonded to an instinct-based, single-lens perspective lives in the very moment. Viewed from this attached mindset perspective the other two types of intuitions *are* intolerant and detached from reality—since they are not sharing the same intuitive reality. Therefore, the others look either weak, crazy, hypocritical, and lazy; or, powerless hairsplitters and lip service elitists. The circle of broken connection is fed by fears and separation (Figure 5.3).

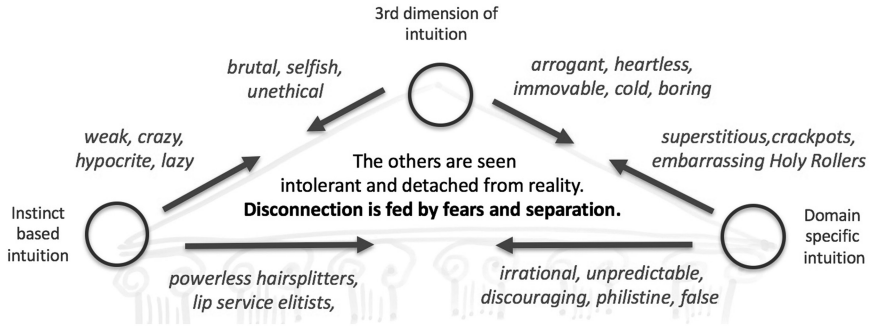

Figure 5.3 Disconnection between the three types of intuitions.

When we are stuck in the single-lens perspective of domain-specific intuition it causes intellectual rigidity, *a closed mindset* with mental barriers and limiting false beliefs. One inventor, holding 300 patents, described having a prototype of an invention that strongly challenges the current scientific knowledge as well as our traditional way of thinking. He had presented the invention to five professors, but all of them had rejected the invention without orienting themselves deeper into the theme, with comments "that is not possible". At the same time the inventor has two well-working prototypes of his invention. How is this possible? On the top of the closed mindset, the human mind is prone to more than a hundred different cognitive perception biases (Lieberman, 2009; Lieberman et al., 2015). One of them is called an investment bias. If an individual has invested enough of something valuable—it can be time, money, energy, thoughts, or whatever is considered valuable—they want to feel their investment is worth the value. Therefore, if a professor has invested several decades for a theoretical construction, it is easier to ignore or explain away the mismatching information than to let the collapsing belief destroy all the previous investments. Maintaining the coherence in our human mind is primary. Our consciousness can bend, shrink, or even split, but it cannot tolerate a break in coherence. The coherence is maintained even *at the cost of reality* (Hayles, 2014).

When looking at the other two intuitions from the perspective of domain-specific intuition, the other two look irrational, unpredictable, philistine, and false; or, superstitious crackpots and embarrassing Holy Rollers. Again, these other two *are* intolerant and detached from reality. When domain-specific intuition dominates, the perspective is well grounded in history and the future but typically has lost the connection to emotions and the body. The third dimension of intuition seems extremely hard to understand since it operates beyond human logic.

If we are driven to the single-lens perspective in the third dimension of intuition, the result is *a fragmented mind* where our thinking spalls with endless associations causing an inability to stay in touch with reality. Some of the interviewees report having periods when magical revelations of radical and unseen future inventions

are reachable to their mind, due to the overkill speed of their mental, multidimensional associations. When looking at the other two intuitions from this perspective, they look either brutal, selfish, and unethical; or, arrogant, heartless, immovable, and boring. In this dimension, there is no concept of time. To sum up, we seldom live in just one perspective; instead we hover in between these all. However, if we do not recognize and acknowledge *all these three diverse intuitions in ourselves*, we are stuck with biases invisible to us and dichotomy.

Integrating Three Diverse Intuitions to Knowledge-Building Practices Is Possible

When we surpassed our current point of view from single-lens perspective and built a connection with another perspective of intuitive information, it did not guarantee us being able to maintain the connection and keep the access open. Contradictorily, we need to surpass our mental obstacles again and again. Therefore, including three diverse angles of intuitive knowledge simultaneously might require almost superhuman skills. However, it is possible, and we can find ways to bind a working connection either by ourselves or in teams.

Let's return to McClintock's case. She had described, when the information was "not integrating," that it was an indicator of a problem. Correspondingly, when her internal system was working, she described it as "*integrating what you saw,*" where she could simultaneously read the environment with her physical eyes as well as with her mind's eye. The physical spots she saw on maize kernels represented for her a hidden genetic meaning that she could read simultaneously. In this very moment, she saw directly into an ordered world of mental images. Her assistant has described what McClintock saw as "*completely unrelated to anything we knew, it was like looking into the twenty-first century,"* and "*just looking over her shoulder, looking at the spots, you could visualize what was going on—she made you see it* (Keller, 1983, p. 137).

Similar experiences of integration have been described by other Nobel Laureates too (Larsson, 2001). For example, Robert A. Millikan, a Nobel Laureate in Physics, was able to look with fresh, clear eyes at what was actually going on; he had intense powers of visualizing and an ability to connect what he saw with a preliminary theory of electricity; and on the top of these, he saw electrons with his eyes! (Holton, 1978, p. 38).

Studies of highly intuitive individuals' thinking suggest that when the information is not integrating, we barricade the way ourselves (Kautz, 2005). When we are unable to reach intuitive information, the problem is located in the connection (Davis-Floyd & Davis, 1997). Therefore, the only thing we need to do is to form a connection to intuitive information and connect ourselves to the solution. To enable this, we need to remove the obstacles blocking our connection to the other

two intuitions. The connection flaw is not outside of us but inside of us. Therefore, in the end, all the problems might be connection flaws.

If we elaborate on this statement from the perspective of the three diverse intuitions, what does a well-working connection look like? In an optimal situation, combining these diverse intuitions takes place in the center of the triangle (Figure 5.4.). In this sweet spot, we are able to get the maximum bandwidth for the best qualities of all these intuitions. The main challenge seems to be how to *detach ourselves from attachments* and *surpass our ingrained thoughts,* which are the most severe biases of intuition (Raami, 2015).

In the optimal situation, our instinct-based intuition is free from attachments such as fears and clinging. To reach this situation, we need to educate our bestial mind to step out of the shadows and feel safe. When moving from single-lens perspective toward the educated mind, we are capable of getting rid of biases of magical thinking and superstitions as well as irrational, emotional reactions-based drives and urges. In the best situation, the instinct-based intuition offers us an ability to perceive with fresh eyes, a courageous drive to take forward visionary, brilliant ideas and integrate them into the practices of the physical world.

To enhance our connection to this type of intuition in practice, we may invoke our physical body. Hands-on work, going for a walk, or applying increasing kinematic playfulness in our work might be beneficial. Several researchers mention that these boost creative thinking (Keinänen, 2016); not to be forgotten arenourishment, sleep, and overall well-being (otherwise the primitive urge inside of us gets cranky!). But above all, the most important is to create an environment of physical and psychological safety. For example, mindfulness practices are often mentioned as being supportive, since they temporarily quiet down our fears, hence increasing our cognitive capacity (Williams et al., 2007).

When we have a working connection to the domain-specific intuition, seeing with fresh eyes integrates us with our expertise. We're able to apply skilled discernment in our process of constructing intuitive and domain-specific information.

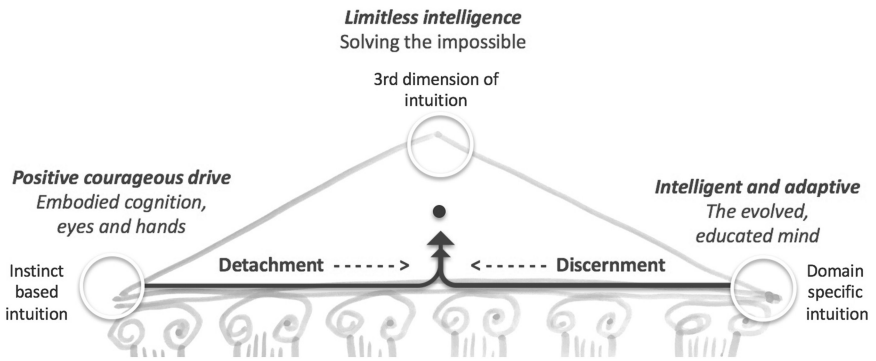

Figure 5.4 Integrating the potential of three different intuitions.

To fully harness the intuition of an educated mind, a resilient and tolerant approach is a prerequisite. This requires open-minded marveling and loosening of beliefs, since we as humans tend to rely on our minds, which may hold the answers but still find it difficult to question the learned dogmas. Therefore, we need to move toward the center of the triangle to get the maximum bandwidth in our thinking to fully access and integrate the third dimension of intuition.

To enhance this process, quieting the mind has been recognized to be highly beneficial. Studies in neuroscience state that any behaviour quieting our thinking can support new insights (Bowden et al., 2005; Jung-Beeman, 2008). Creative practitioners often mention routine tasks like tinkering and crafting with deep concentration being helpful since this keeps the mind busy, which in turn creates porosity in thinking—thus easing access to intuitive faculties (Lee-Zlotoff, n.d.; Raami, 2015). Further, sensitiveness toward embodied signals is frequently mentioned as a beneficial tool. Numerous business leaders report utilizing gut feelings, goose bumps, or other embodied signals in decision-making (Gigerenzer 2007).

The most challenging source of intuition for an ordinary individual may be accepting and integrating the third dimension. This is no wonder since it has been excluded from our reason-based thinking—even so profoundly that it lacks decent scientific concepts and vocabulary. At best, when connecting to the third dimension of intuition we can access limitless intuition that flows freely (Kautz, 2005; Peirce, 2013; Targ, 2012). Yet we need to be alerted to the biases of the other two intuitions: the attachments of the primitive mind and expert-based ingrained thinking. But when reaching the state of detachment and discernment, we are capable of acquiring information from limitless intelligence and integrating what we see to our current expertise.

Typically, accessing this type of intuition is based on highly personal methods, which often are innate and originate from childhood. However, it is possible to develop the process of intuiting and enhance accessing and integrating intuitive information (Hogarth, 2001; Peirce, 2013; Raami, 2015). Typically, this requires constant unlearning from false beliefs and limiting mental structures. For boosting the process, we can study the methods used by highly intuitive experts. These include controlled remote viewing, radiesthesia, organizational constellations, and other direct knowing practices (Targ, 2012; Kautz, 2005; Peirce, 2013; Roevens, 2008). For ordinary people these methods may sound weird, and instead we all benefit from dreams, exercises boosting intuition, creative arts, or meditation. For many people, the methods integrating physical relaxation with loosened mental rigidity work well. The classic external facilitators for creative insights are the three B's—bath, bed, and bus—typical places supporting physical and mental relaxation and the free flow of ideas (Bastick, 2003).

The three types of intuition are rarely used simultaneously, and we tend to sway between them as if braiding them together. As this is challenging for an individual, we can instead utilize the intuitions brought together by a team. This, of course, requires us to accept the existence of these three types of intuitions, be aware of their

benefits, and acquire the power of discerning intuition. To achieve this, we can create a collective comfort zone supporting the culture of trust and acceptance, where both the limitations and the potentials of individuals can be harnessed for achieving these goals (Mälkki, 2011; Raami, 2015). In the solving of difficult problems or complex decisions it is important to integrate the entire potential of intuition, after all.

Summary

From the point of view of intuition, impossible problems do not exist. There is only the incapability of seeing the solutions. When acquiring information through intuition, the sole barrier we need to exceed is our human mind. This is not easy, since we do not understand how our mind restricts our view. Further, it is difficult to recognize our biases when perceiving intuitive information. While discerning what is accurate and reliable intuitive information, it is essential to remember we have different types of intuitions, which are based on diverse bases of knowledge. Based on interviews, it seems as if the continuum of intuition is not sufficient alone; in addition we need to include three separate dimensions of intuition. In decision-making and inventing, it is essential to recognize all three types of intuitions: instinct-based intuition, domain-specific intuition, and the third dimension of intuition. In a team, the information from diverse intuitions can be brought together. It is not necessary for every single person to have access to all the differing types of intuition, but it is imperative to be able to break down the barriers and mental blocks. Only then is it possible to harness the limitless potential of intuition to aid inventiveness and decision-making.

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