

Extraverted Versus Introverted Functions

Descriptions and Examples

Four Types of Cognition

Recall that this model identifies four distinct types of cognition.

Sensing (S)	concerned with physical reality; what is concrete and observable; objects perceived by the five senses
Intuition (N)	concerned with abstract concepts and images; interpreting what different symbols and ideas mean
Thinking (T)	concerned with facts and information; what is useful or practical; things that can be proven true or false
Feeling (F)	concerned with preferences, tastes, and aesthetics; differences or similarities in values; relationships with others

Two Cognitive Orientations

This model also identifies two distinct cognitive orientations.

Extraversion (E)	concerned with 'objective' or external reality; looks for information or feedback outside of oneself; interprets or judges based on common or shared standards
Introversion (I)	concerned with 'subjective' or internal reality; filters information based on personal guidelines or perception; generates and applies internal standards

Eight Cognitive Functions

Each type of cognition has both orientations to produce the eight cognitive functions.

Introverted Sensing (Si)	Extraverted Sensing (Se)
Introverted Intuition (Ni)	Extraverted Intuition (Ne)
Introverted Thinking (Ti)	Extraverted Thinking (Te)
Introverted Feeling (Fi)	Extraverted Feeling (Fe)

These eight functions are defined and described in more detail in [this overview](#).

Sensing: Extraverted (Se) vs. Introverted (Si)

“What’s Here Now” versus “What Was Before”

The Scenario

Sam and Robert are colleagues who both work long hours on the same factory floor using a variety of heavy industrial equipment. Because their job is physically demanding and their shift starts early in the morning, they both have to make sure to eat a large breakfast before heading out the door.

During the workweek, Robert eats the same breakfast every single day: a bowl of oatmeal with fifteen blueberries, and two fried eggs over medium on a piece of rye bread. He only changes this habit sometimes on the weekend, or for special occasions when he goes out to eat for breakfast. As a result, he can tell what day of the week it is by how many blueberries are left in the fridge. This is because he goes shopping every Sunday and buys the same brand of blueberries – the carton located on the third shelf of the fruit aisle in the produce section.

Robert is also quite particular about the way he makes his coffee. He makes exactly one cup of the same brew, adds a quarter cup of cream, microwaves it for 30 seconds, and stirs in two teaspoons of sugar. One day, he ran low on sugar, and he could tell the proportions were off by how the coffee tasted slightly more bitter than normal. He found it difficult to tolerate this slightly unpleasant change, and it affected the rest of his morning routine.

Sam has a shelf full of different types of coffee. He doesn’t plan which type he wants to brew. Instead, every morning when he gets up he makes a spur-of-the-moment choice based on what he’s craving that day. Usually, he picks some sort of vanilla or caramel flavor, but if he has the same type too many days in a row, he gets bored and feels a need to change it up.

Sam has tried to create a morning routine and stick to it but finds that committing to habits doesn’t always create effective results. For example, he can only sense what he wants to eat that morning based on how hungry he is. For that reason, he’s just decided to buy a variety of different things: cereal, croissants, waffles, etc. Many days, he’ll even pack two lunches because he doesn’t know what he’ll want to eat until it’s lunchtime.

At the beginning of each shift, Robert and Sam spend some time organizing the tools in their locker. Sam’s locker is rather organized. He tries to keep everything accessible because he doesn’t track what he uses most often. He’ll pick which tools to take with him to the floor depending on the upcoming job. Robert’s locker looks more disorganized, but it doesn’t affect him, because he knows where things are and which tools are more important. He also tends to wear the same overalls to every shift because he can put the same tools in his belt and pockets in familiar locations.

In conclusion, Sam and Robert have done their best to find approaches that work for them given their different inclinations when it comes to physical health and work organization.

Sensing: Extraverted (Se) vs. Introverted (Si)

“What’s Here Now” versus “What Was Before”

The Explanation

Some things to notice about Sam, who uses extraverted sensing (Se):

- He is good at noticing patterns in the moment, and how things are arranged around him according to an outside perspective.
- He prefers to impact situations as they come up and adapt to the changing circumstances, and takes less into account the way things were before.
- He tends to make choices or drive results based on what is gratifying in the here-and-now rather than finding comfort in stable experiences over time.

Some things to notice about Robert, who uses introverted sensing (Si):

- He remembers how to arrange things according to what’s familiar, which makes him reliable at facing and dealing with repeated situations.
- He notices many details in his physical environment and can get thrown off because even small changes make a big difference to his comfort level.
- He tends to make choices that preserve a stable baseline and finds that pursuing gratification interferes with this personal stability.

Further Investigation

1. What do you think are the advantages of using “Se” over “Si”, or vice-versa? What are the disadvantages?
2. Can you think of other situations where it is appropriate to perceive things freshly as they arise? What about by comparing perception to previous experience?
3. Which of these types of “sensing” do you notice that you prefer to use? Which one do you find annoying or difficult?

Intuition: Extraverted (Ne) vs. Introverted (Ni)

“What’s Possible Now” versus “What Will Be”

The Scenario

Tim and Delilah are both managers at a technology company that sells medical hardware to hospitals. Their boss, Jason, pulls them into a meeting and tells them the company has had a disappointing two quarters. He asks both of them to come up with a plan to improve both sales and customer satisfaction in the next quarter.

Tim dives into the problem headfirst by reaching out to the sales staff and setting up a meeting to discuss any issues with closing. He asks everyone to share the B2B pitches they’ve been using and then invites everyone to workshop six or seven different ways to improve their dialogue. Additionally, while the company has generally never done cold calls, Tim throws that in as a possibility – instead of reaching out to insurance providers and hospital networks exclusively, he thinks the salespeople ought to consider calling providers directly and ask what type of hardware providers wish they had while on-call.

Next, Tim calls two of his close friends who are engineers in completely different industries. They spend a couple of hours talking about different kinds of prosthetic devices. This conversation inspires Tim to draw out a bunch of new blueprints for implants using unconventional shapes and materials. He’s not sure that any of these architectures are solid, but the important thing is to map out their potential value.

Delilah, who was also at the sales meeting that Tim called, gathers a different set of impressions. She notices that there are basically two main issues that the salespeople need to focus on. One issue is that many salespeople aren’t sufficiently trained in the technical details of their company’s highest-grossing anesthetics and electrodes. The second issue is that they aren’t spending enough time emphasizing the low cost of materials and ease of delivery.

To address these problems, Delilah wants to run a series of courses to train the sales staff on the appropriate medical knowledge for certain products; why this knowledge is relevant to their target markets; and how those markets save on fixed costs because of the company’s patented manufacturing process.

At the end of the month, both Tim and Delilah present their findings. Tim circles through many topics, and he tries to whip up an engaging back-and-forth between him and Jason. He listens carefully to how Jason reacts to each proposal, and when Jason replies with an opinion, Tim quickly tries to imagine where those opinions might lead next.

Delilah structures her presentation quite differently. She aims to convince Jason to follow her carefully crafted solution. She’s not closed-minded, but she’s put a lot of foresight into her discovery and knows that her way offers less room for distractions and waste.

In conclusion, Tim and Delilah both bring helpful information to the table for Jason to consider, though their observations are considerably contrasting.

Intuition: Extraverted (Ne) vs. Introverted (Ni)

“What’s Possible Now” versus “What Will Be”

The Explanation

Some things to notice about Tim, who uses extraverted intuition (Ne):

- He focuses on getting lots of different ideas to flow together. When collecting perspectives, he is not as concerned with how accurate or realistic they are, but with how innovative they are and whether they stimulate those around him.
- He draws up a lot of different abstract strategies. He considers the many ways things may unfold and tends to avoid attaching to a narrow interpretation.
- He looks primarily to other people and situations to form fluid mental associations, instead of making deep inferences on his own.

Some things to notice about Delilah, who uses introverted intuition (Ni):

- She focuses on shaping the future toward a more comprehensive vision that she develops, and then determines how she may work ideas and people into that personal vision.
- She is hesitant to keep re-mixing and re-considering perspectives when it seems more obvious to pursue a path that won’t be messy or chaotic.
- She condenses a lot of different insights together. She hones in on a core set of associations based on what she notices is essential among all of them.

Further Investigation

1. What do you think are the advantages of using “Ne” over “Ni”, or vice-versa? What are the disadvantages?
2. Can you think of other situations where it is appropriate to perceive things based on many short-term possibilities? What about by extrapolating far into the future?
3. Which of these types of “intuition” do you notice that you prefer to use? Which one do you find annoying or difficult?

Thinking: Extraverted (Te) vs. Introverted (Ti)

“What Works” versus “What’s Correct”

The Scenario

Pamela and Aaron work closely together at a car shop as mechanics. Pamela is in charge of maintaining inventory, ordering new supplies, and doing routine maintenance while Aaron works on vehicles with more significant issues or those with customized builds.

Through years of experience, Pamela has created a solid system for making everyday oil changes painless. When she trains new employees, she points to the signs above each area of the garage that contain checklists to complete. She also hands them a physical checklist with additional tasks based on whether the vehicle is a sedan, diesel truck, hatchback, etc.

One time, a new employee suggested separating self-tapping screws into different drawers based on color. Pamela initially thought her way of separating the screws by material alone was good enough. However, the employee made a convincing argument on why separating the screws by color as well was more effective. Thus, she decided to make the change.

This year, the local IATF (International Automotive Task Force) chapter published an article describing the production of a newer, synthetic oil mixture that contains more environmentally-friendly components. It has been tested in six different consumer markets and has been shown to lower emissions significantly. As a result of absorbing this information, Pamela makes sure to order this new product moving forward and phase out the old one.

Aaron looks at how Pamela performs, and while he respects her efficiency, he notices that she struggles to handle situations that fall outside of the typical “handbook”. For example, one customer brought in a pickup that had been in a bad accident. While replacing the smashed front bumper, Aaron realized some of the dashboard wiring had been corrupted. Neither he nor Pamela had done this type of work before, but Aaron was able to figure out how to rewire it through some experimentation and on-the-spot learning about how the cluster fuse connects to the battery.

Lately, Aaron has made some friends with a few local bikers, so to generate more business he’s offered to build and finish their motorcycles if they bring him a base model. Each base model is unique, and he gets to judge which after-market parts to order per project. The cool thing is that despite what anyone else claims is the best practice, he gets to decide on which types of finish will satisfy customer requests. For example, some colleagues suggest using an enamel finish and doing three spray-outs, but he knows he’s skilled enough to create a vintage look by using lacquer with just two coats.

In conclusion, although both Pamela and Aaron have the same job title, they’ve learned to split responsibilities in a mutually beneficial way based on different styles.

Thinking: Extraverted (Te) vs. Introverted (Ti)

“What Works” versus “What’s Correct”

The Explanation

Some things to notice about Pamela, who uses extraverted thinking (Te):

- She focuses her developing reproducible, step-by-step approaches in her work and leadership. Emphasizing these standards allows the work to get done efficiently and consistently. It also makes her system easier to communicate widely.
- She sources much of her logical judgment from outside sources, such as published articles and official studies that provide information on supplies and procedures.
- If there is a conflict between what she thinks makes sense versus what someone else proves to her that is practical, she overrides her own reasoning in favor of what’s shared.

Some things to notice about Aaron, who uses introverted thinking (Ti):

- He focuses on tackling problems that don’t fit into a simple category or framework. Instead, his approach to work is more like a puzzle to solve, where the puzzle is slightly different each time.
- He pays attention to unusual logical connections, such as how different parts could be rearranged, and applies his own reasoning to create builds or make fixes.
- If there is a conflict between what he thinks versus what someone recommends to him as the best or most effective course of action, he listens to himself over what’s shared.

Further Investigation

1. What do you think are the advantages of using “Te” over “Ti”, or vice-versa? What are the disadvantages?
2. Can you think of other situations where it is appropriate to decide based on established, public rationale? What about private sense-making?
3. Which of these types of “thinking” do you notice that you prefer to use? Which one do you find annoying or difficult?

Feeling: Extraverted (Fe) vs. Introverted (Fi)

“What’s Considerate” versus “What’s Satisfying”

The Scenario

Jessica and Emily are both members of the same church. They are both sociable and warm women who enjoy organizing get-togethers for the members of their community. Emily is on the church’s board and therefore puts together many of the official church events, while Jessica teaches some classes at church and also at her own home.

What drives Emily is getting people together to plan and organize activities. The church hosts a Christmas auction every year, and she is the one who puts together teams to procure donated items, cook a variety of food, and play music. Her biggest concern is that the event runs smoothly. Everybody around her, including the teenagers and kids, says that Emily’s energy is what makes the auction special.

Emily always makes sure to send email surveys to all church members after the events to collect feedback. While she knows she isn’t able to incorporate all the feedback people give, she makes sure to read all of it, and personally thank the people who offer it. One year during Easter communion, Jessica insisted on putting up more elaborate decorations and brighter lighting in the sanctuary. Emily herself was not particularly enthusiastic about the idea, but she was happy to accommodate Jessica’s wish and made sure to find room in the budget to buy new materials.

Jessica, on the other hand, is driven to teach classes because she gets to tell stories that inspire others to grow and develop their talents. In her classroom, she has the opportunity to instill positive values into others: curiosity, persistence, and respect.

After many months, Jessica felt she was limited by the church’s curriculum so she began hosting private monthly symposiums in addition. She built a small annex in the backyard for these symposiums and then furnished it with baby barrel cactus plants. Her contractor offered to paint the walls a brown color to match the outside lumber and make it look professional. However, Jessica decided to paint the walls orange, which is her favorite color.

She prefers that her symposiums have some educational value, especially if they involve teaching about things she’s personally interested in. After one evening, Emily pulled her aside and urged her to make an effort to explore different topics besides gardening and fitness. While Jessica listened carefully, she preferred not to make changes. After all, Emily was welcome to host her own get-togethers. Jessica figured that she would attract the people she enjoyed the most with her style and that anyone who didn’t fit wasn’t obligated to attend.

In conclusion, Jessica and Emily don’t always see eye-to-eye, but they’re good friends and have each found ways to be of service and get involved with the people they care about.

Feeling: Extraverted (Fe) vs. Introverted (Fi)

“What’s Considerate” versus “What’s Satisfying”

The Explanation

Some things to notice about Emily, who uses extraverted feeling (Fe):

- She sees the purpose of activities as connecting with many different types of people, and making sure they all feel welcome. She takes a lot of pride in the fact that she can bring people together toward a common goal.
- She sources a lot of her value judgments from what the people around her value, and therefore finds it important to check how others around her would respond.
- If someone else feels strongly about something, she is eager to acknowledge the preference even if she doesn’t feel one way or another about it.

Some things to notice about Jessica, who uses introverted feeling (Fi):

- She is most enthusiastic when she gets to decide how to impact the people around her, often by being a moral example and connecting with those who appreciate her for it.
- She expresses herself just the way she is, and would rather not let others influence her tastes. She respects that others do things differently and wants the same respect extended to her.
- If she feels strongly about something, she remains authentic to that feeling, though she may not always find common ground with someone else.

Further Investigation

1. What do you think are the advantages of using “Fe” over “Fi”, or vice-versa? What are the disadvantages?
2. Can you think of other situations where it is appropriate to judge things based on common ethical values? What about personal morals?
3. Which of these types of “feeling” do you notice that you prefer to use? Which one do you find annoying or difficult?

Commonalities Among Functions

The Extraverted Functions

The extraverted functions all place a high premium on what comes from outside of oneself. They are more adaptive than their introverted counterparts in the sense that they adapt to the realities going on around them without attaching to any specific part of that reality. In some cases, the person using extraverted cognition merges entirely with the world outside of them and loses their sense of self.

The Introverted Functions

The introverted functions all place a high premium on what comes from oneself. They are more grounded than their extraverted counterparts in the sense that they ground into particular aspects of reality that matter despite how the realities around them keep changing. In some cases, the person using introverted cognition is so focused on their individuality that they neglect to interact with information in the outside world.

Archetypes Use Multiple Functions

The examples in this document were developed specifically to highlight the difference between introverted and extraverted cognitive functions. However, **all archetypes use a combination** of different extraverted and introverted functions on a regular basis. Thus, in each example, you'll be able to identify ways in which the person uses the highlighted (E/I) function in concert with a different function of the opposite (I/E) orientation.

For instance, when Aaron uses introverted logic to fix cars (Ti), he applies it based on his external perception of physical mechanics (Se). Thus, **archetypes are not classified primarily by** how strong or skilled they are at using **extraverted or introverted functions alone**. All extroverts possess well-developed introverted functions, and all introverts possess well-developed extraverted functions.

Instead, what determines whether an archetype is labeled extraverted or introverted overall is the *preference for and comfort by which* certain functions are used. Extraverted archetypes use their extraverted cognitive functions in a dominant and optimistic manner, but they use their introverted functions in a more calculated or guarded fashion. The opposite is true for introverted archetypes.

Another way of saying this is that extroverted types enjoy using certain extroverted functions, and find that this comes naturally to them, but turn toward their introverted functions for additional support or guidance (vice-versa for introverted types).