Emotions:
Understanding the Basics

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This is a translation of chapter 21,
As a result of Daniel Goleman’s research, emotional intelligence has become a hot subject in the business world. Lyle Spencer Jr., co-founder of one of the most important human resources consultancies (Hay Group), maintains that “what you learned in school distinguishes superior performers in only a handful of the five or six hundred jobs for which we’ve done competency studies. It’s just a threshold competence; you need it to get in the field, but it does not make you a star. It’s the emotional intelligence abilities that matter more for superior performance.” It’s precisely these emotional competencies that are so saliently missing from the curriculum of our traditional educational institutions.

Summarizing his experience, Goleman comments that after analyzing 181 competence models from 121 organizations worldwide, he found that “67 percent – two out of three – of the abilities deemed essential for effective performance were emotional competencies. Compared to IQ and expertise, emotional competence mattered twice as much.”

Increasing numbers of companies are discovering that emotional competencies mean competitive advantages. With the general adoption of this idea, emotional intelligence has become an essential condition for survival. Emotional intelligence is what allows the mission, vision and values of the company to be consistently put into practice amidst daily pressures. In order to respond to the dizzying, intense rhythm of changes in products, markets, prices and consumer and employee preferences, organizations need a permanent anchor in a vision, mission and values. Just as an automobile needs its wheels aligned to move quickly and smoothly, organizations need a coherent culture to effectively operate in turbulent surroundings. Whether it’s the mechanics of physics or business, the law is the same: the faster the periphery rotates the quieter, more solid and imperturbable the center must be; otherwise the slightest internal vibration can end up destroying the structure.

A survey of corporate practices – by the American Society of Training and Development – showed that 80% of companies are trying to improve their employees’ emotional intelligence through training programs. They also use emotional intelligence as criterion for performance evaluations and as an aptitude necessary for positions. Another national survey of suppliers to North American governments determined that companies consider technical capacities of less importance than emotional ones. As a result, employers look for people who are flexible yet firm in the face of the unexpected, confident and motivated, as effective in interpersonal relations as in groups, and reliable in the areas of communication, negotiation, conflict resolution, leadership and commitment to the organization.

In spite of the increasing demand for emotional intelligence in the labor market, the supply of emotionally capable people has diminished. Whereas the general population’s IQ has increased over time, the
demonstrated emotional quotient (EQ) has steadily decayed. Goleman’s research reveals more emotional problems among youth than their elders. “On average,” concludes the study, “children are growing more lonely and depressed, more angry and unruly, more nervous and prone to worry, more impulsive and aggressive.”iv According to specialists, the decay of emotional intelligence in minors is severe. Clear signs of it are the increasing numbers of youth problems like despair, alienation, drug use, crime, violence, depression, eating disorders, unwanted pregnancies and dropping out of school.

In his book *The 7 Habits of Highly Effective Families*, Stephen Covey reflects on the growth of the challenges to emotional development in the last 40 years and presents the following data.v

- Illegitimate birth rates have increased more than 400%.
- The percentage of families headed by a single parent has more than tripled.
- The divorce rate has more than doubled. Many project that about half of all new marriages will end in divorce.
- Teenage suicide has increased almost 300%.
- The number one health problem for North American women today is domestic violence. Four million women are beaten each year by their partners.
- One-fourth of all adolescents contract a sexually transmitted disease before they graduate from high school.
- While in 1940 the biggest discipline problems – according to North American school teachers – were talking out of turn, chewing gum, making noise, running in the halls, cutting in line, dress code infractions and littering; in 1990 the reported problems were: drug and alcohol abuse, pregnancy, suicide, rape, robbery and assault.
- The average youth spends seven hours a day watching television… and five minutes with Dad.

These social problems are simultaneously the causes and symptoms of emotional deficiencies that also affect the labor capacity of new generations.

In a study cited by Golemanvi about the factors that frequently harm executive performance, the researchers found that the key was their emotional incompetence. Ineffective leaders lacked:

a) **Flexibility:** they were incapable of adapting their style to changes in the organizational culture, or were incapable of changing in response to feedback. They were not open to listening or learning;

b) **Bonding:** they were too critical, insensitive or demanding; they alienated those with whom they worked. They didn’t know how to establish genuine bonds with people;

c) **Self-control:** they had little capacity to work under pressure and tended toward moodiness or angry outbursts. They lost their composure, calm and confidence in stressful or crisis situations;

d) **Responsibility:** they reacted to failure and criticism defensively, denying, covering up or blaming others. They didn’t take responsibility for their errors, nor move to correct them;

e) **Trustworthiness:** they were too ambitious and often willing to get ahead at the expense of others. They didn’t demonstrate integrity or pay attention to the needs of their subordinates and
colleagues. They were only interested in impressing their boss;

f) **Social skills**: they didn’t show empathy or sensitivity. Usually they were caustic, arrogant and prone to intimidating their subordinates. They were deceptive and manipulating;

g) **Respect and Cooperation**: they were incapable of constructing a network of mutually beneficial, cooperative relationships. They were unappreciative of diversity, and looked to homogenize the group.

These “challenges” have emotional causes. Formal education only focuses on intellectual competencies. Yet those who exclusively concentrate on technical skills usually become, paradoxically, emotionally incompetent. At the beginning of their career, this disadvantage isn’t too obvious; generally they are promoted until the incompetence becomes evident. A professional who is promoted for his technical expertise radically changes the axis of his effectiveness upon becoming a manager. His responsibility is now to deal with people, a responsibility for which he’s not prepared. Perhaps this is why we often find sarcastic, unpleasant and socially inept people occupying positions of power.

In his analysis of the challenges for 21st century management, Peter Drucker emphasizes the need to develop the emotional competencies required to lead other human beings.

“A regimental commander in the army [equivalent to a senior manager], only a few decades ago, had held every one of the jobs of his subordinates – battalion commander, company commander, platoon commander. The only difference in these respective jobs between the lowly platoon commander and the lordly regimental commander was in the number of people each commands; the work they did was exactly alike. To be sure, today’s regimental commanders have commanded troops earlier in their careers – but often for a short period only. They also have advanced through captain and major. But for most of their careers they have held very different assignments – in staff jobs, in research jobs, in teaching jobs, attached to an embassy abroad and so on. They simply can no longer assume that they know what their “subordinate,” the captain in charge of a company, is doing or trying to do – they have been captains, of course, but they may have never commanded a company.”

“[The] relationship [between a manager and employee] is far more like that between the conductor of an orchestra and the instrumentalist than it is like the traditional superior/subordinate relationship. The superior in an organization employing knowledge workers cannot, as a rule, do the work of the supposed subordinate any more than the conductor of an orchestra can play the tuba. In turn, the knowledge worker is dependent on the superior to give direction and, above all, to define what the “score” is for the entire organization, that is, what are standards and values, performance and results. And just as an orchestra can sabotage even the ablest conductor – and certainly even the most autocratic one – a knowledge organization can easily sabotage even the ablest, let alone the most autocratic, superior. Altogether, an increasing number of people who are full-time employees
have to be managed as if they were volunteers. They are paid, to be sure. But knowledge workers have mobility. vii

In order to prevail in this environment of knowledge workers, companies are increasingly discovering how necessary it is to develop knowledge managers. But whereas knowledge worker intelligence is based mainly upon content, for knowledge managers intelligence is predominantly based upon context. While workers need to know the most modern techniques to do their job, managers need to develop a type of human-emotional technique to coordinate workers’ efforts.

In spite of Drucker’s title (Management Challenges for the 21st Century), this idea isn’t new. By the 1960s, Douglas McGregor was speaking of the “human engineering” necessary to lead people and how blind managers are to it. (See Metamanagement, Volume 1, Chapter 6, “From Unilateral Control to Mutual Learning.”)

“In engineering,” McGregor writes, “control consists in adjustment to natural law. It does not mean making nature do our bidding. We do not, for example, dig channels in the expectation that water will flow uphill; we do not use kerosene to put out a fire. In designing an internal combustion engine we recognize and adjust to the fact that gases expand when heated; we do not attempt to make them behave otherwise. With respect to physical phenomena, control involves the selection of means which are appropriate to the nature of the phenomena with which we are concerned. In the human field the situation is the same, but we often dig channels to make water flow uphill. Many of our attempts to control behavior, far from representing selective adaptations, are in direct violation of human nature. They consist in trying to make people behave as we wish without concern for natural law. Yet we can no more expect to achieve desired results through inappropriate action in this field than in engineering.” viii

Throughout this and the next two chapters, we’ll look at principles of “emotional engineering” that enable closing the gap between organizational needs and individual capacities. First though, we’ll investigate what emotions actually are and how they’re inextricably intertwined with thoughts, sensations and behavior.

Emotions

Imagine yourself on top of a mountain, on a beautiful day, ecstatic at the panoramic beauty stretching before you. What do you notice? The deep blue sky, the crisp air, the vast horizon, the whispering wind, the warming sun, the silence. What do you do? Sit, contemplate the surroundings, shoot some photos, drink water, eat a snack, rest.
Now, without changing the scene, imagine that you hear the ominous growl of a large wild animal. In an instant, everything you were noticing disappears, the deep blue sky, the crisp air, the vast horizon, the wind, sun and silence. In their place you suddenly notice how alone you are; you see possible escape routes, potential weapons and hiding places. After the growl, it’s unthinkable to sit, drink, eat or relax and revel in the beauty. In circumstances like these, a normal response is to flee, look for a way to defend yourself or shout out for help.

What makes the growl so capable of changing your world and behavior? The growl of course doesn't change the world, but rather affects your emotional state. As a result of this emotional shift, you change your perception and your actions. When you were calm, your mind focused on the sky, the air and the wind; when you became afraid, your mind focused on escape routes and nearby stones for defense. It's not that when calm the escape routes and stones weren’t there, or that when scared the blue sky and warm sun disappear. It's that in one emotional state (peaceful) there are relevant sensory experiences, and in another (scared witless), they lose their relevance, they're excluded by a pre-conscious filter in our perception. As I explained in Chapters 5, “Mental Models” (Metamanagement, Volume 1) and 12, “Ladder of Inference” (Metamanagement, Volume 2), given that the mind is incapable of holding the infinite complexity of reality, we need to pre-consciously choose where and where not to focus our attention. Emotions are what guide this automatic process of determining relevance.

Just as a calm mind concentrates on the beauty of a landscape, taking photos or eating, a scared mind concentrates on shouting for help, defending or fleeing. It’s not that it’s impossible to run or shout when calm, nor is it impossible to contemplate the view when scared. It’s that when we get overwhelmed by fear, we can’t act as we did when we were calm. Emotion not only conditions our experience, but it also defines our range of possible behavior.

The impact of the growl on your perception and behavior is a consequence of its impact on your thoughts and feelings. In your initial serenity, you might think, “It's so beautiful and peaceful here” or “How high is this peak?” or “I feel so far from the daily problems of work.” But in your subsequent panic, those thoughts are replaced with “It’s so dangerous here!” or “What am I thinking walking alone on this mountain?” or “And I thought I had problems at work, what a joke; now I've got real problems…” Before the growl, you felt content, satisfied and at peace; after the growl, those feelings sink in a sea of fear, nervousness and anxious tension.

Besides conditioning our perception and behavior, thoughts and emotions affect our physiology. Different emotional states correlate with the secretion of different hormones and with metabolic changes. For example, when we’re afraid, the amygdale secretes the hormone corticotrophin (CRH) which, in turn, stimulates the secretion of a multitude of other substances that mobilize our fight or flight reaction. Additionally, the amygdale releases noradrenalin and dopamine, which are in charge of heightening our senses. These hormones divert energy from parts of the brain that aren't as necessary to handle the crisis, like the centers for memory and logic, and redirect it to the senses and the various perception
centers. The same hormones also influence the cardiovascular system: the heart rate accelerates and blood is diverted from cognitive processes toward muscles and the extremities, preparing the body to respond to the emergency. The level of blood sugar (combustible) rises and nonessential activities (like digestion) decrease. The overall effect is a heightening of the senses, a clouding of reasoning and a switching on of our “automatic pilot” for survival. In this state, the behaviors we’ve repeated and recorded throughout evolution (fight, flee, surrender), happen automatically.

It’s crucial to realize that the growl is not a stimulus that causes a conditioned response, but a trigger that urges an autonomous reaction. If you’re a hunter instead of a tourist, upon hearing the growl, instead of fear you might feel enthusiasm. Instead of dark thoughts, your mind may become occupied planning a hunting strategy. Instead of registering the hiding places and escape routes you could use, you’ll pay attention to the hiding places and possible escape routes the animal could use. Instead of running, you’ll sit tight and rest assured with your rifle. Even your endocrinal physiology will differ. The catecholamine secreted at the time – like adrenalin and noradrenalin – drive the activity much more productively than corticotrophin (which helps prepare the body for fight or flight). By activating the sympathetic nervous system, the catecholamine elevate the energy level, allowing maximum mental and physical effort. This is what’s called “good stress,” as opposed to distress, or “bad stress.”

**Emotion, physiology, reason and behavior**

According to the psychologist and philosopher William James, “If we fancy some strong emotion and then try to abstract from our consciousness of it all the feelings of its bodily symptoms, we find we have nothing left behind, no ‘mind-stuff’ out of which the emotion can be constituted, and that a cold and neutral state of intellectual perception is all that remains. What kind of emotion of fear would be left if the feeling neither of quickened heart-beats nor of shallow breathing, neither of trembling lips nor of weakened limbs, neither of gooseflesh nor of visceral stirrings, were present, it is quite impossible for me to think. Can one fancy the state of rage and picture no ebullition in the chest, no flushing of the face, no dilation of the nostrils, no clenching of the teeth, no impulse to vigorous action…?” (The etymology of “emotion,” from the Latin emovere, “to move out,” is congruent with this interpretation of a bodily-expressed internal impulse.)

The neurobiologist Antonio Damasio agrees with James’ explanation but considers it incomplete: “The main problem…is that James gave little or no weight to the process of evaluating mentally the situation that causes the emotion. His account works well for the first emotions one experiences in life, but it does not do justice to what Othello goes through in his mind before he develops jealousy and anger, or to what Hamlet broods about before exciting his body into what he will perceive as disgust, or to the twisted reasons why Lady Macbeth should experience ecstasy as she leads her husband into a murderous rampage.”
In the model we propose, the human phenomenon is an integral whole that can be investigated from four points of view: physiological, emotional, rational and behavioral. But these four dimensions are merely different ways of approaching a common phenomenon; all of their elements are actually systematically interconnected and consistently affecting each other. Just as emotion can affect physiology, reason and behavior, physiology influences emotion, reason and behavior. Psychotropic drugs are a classic case of this. The same circular relationship exists between behavior and the other three elements. For example, when we run we create physiological changes (endorphin secretion), feelings of euphoria and positive thoughts. (It's been widely proven that physical exercise is a powerful remedy for stress and depressed states.) Finally, thoughts themselves can fire off the other dimensions. Anyone who has awoken in the middle of the night thinking about a test the following day knows it’s possible for the imagination to create anxiety, stomach problems and insomnia.

The operative question here is not so much what causes what (all the systematic causalities are circular), but rather what is the most productive way to intervene in the system? When we feel physically and emotionally bad, and we’re thinking and behaving poorly, what is the most useful thing we can do to change the situation? In this text we’re specifically looking at the relationship between emotions and thoughts, but in some cases it may be even better (or necessary) to explore the other connections. For example, it’s useless to try to calm yourself by analyzing your thoughts if your anxiety comes from having had too much caffeine; in the same vein, taking lithium capsules to correct a neurological imbalance that causes manic depression can be much more effective than psychotherapy.

**Emotion and rationality**

Common opinion is that emotions work against rationality and therefore against efficiency. Nevertheless, modern neurobiological and cognitive theories claim exactly the opposite: it's impossible to be rational without being emotional. Certainly emotions can cloud our awareness, but without emotions there’s not even a chance of being aware. Emotions appear long before thoughts in human evolution and our own development. The parts of the brain that handle rational thought (the frontal lobe and the neocortex) develop from and remain firmly rooted in the areas of the brain that handle basic emotions (the amygdala and the limbic system). As Damasio puts it: “The apparatus of rationality, traditionally presumed to be neocortical, does not seem to work without that of biological regulation, traditionally presumed to be subcortical. Nature appears to have built the apparatus of rationality not just on top of the apparatus of biological regulation, but also from and with it.” He goes onto suggest that “emotion and feeling, central aspects of biological regulation…provide the bridge between rational and nonrational processes, between cortical and subcortical structures.”

Damasio accepts there’s some wisdom in the belief that emotion disrupts reasoning in certain circumstances. He can understand why someone might think of emotion as a secondary function of the mind, as something that is simply an accompaniment to rationality, merely instinctive and trivial.
Nonetheless, he argues that traditional cognitive models don’t understand that “reduction in emotion may constitute an equally important source of irrational behavior.”

Damasio presents two dramatic examples of the effects emotions have on reasoning. First is that of Phineas P. Gage, a railroad foreman that in 1848 suffered a serious cerebral injury. While his crew was dynamiting an outcrop of hard rock, Gage’s head was impaled by an iron rod that destroyed part of his brain and left him with a hole one and a half inches in diameter. Surprisingly, Gage not only didn’t die, but he was pronounced cured in less than two months. Even more surprising, though, was the extraordinary change in his personality. His general character, tastes and likings, and dreams and aspirations changed radically. Someone who knew Gage stated, “Gage’s body may be alive and well, but there is a new spirit animating it.”

According to the report of Dr. John Harlow, his original doctor, Gage’s “physical recovery was complete” but “the balance between his intellectual faculty and animal propensities had been destroyed. (…) He was now fitful, irreverent, indulging at times in the grossest profanity which was not previously his custom, impatient of restraint or advice when it conflicts with his desires, at times pertinaciously obstinate, yet capricious and vacillating, devising many plans of future operation, which are no sooner arranged than they are abandoned. (…) A child in his intellectual capacity and manifestations, he has the animal passions of a strong man.”

These characteristics of Gage’s new personality contrasted sharply with his old self. Before the accident, Gage had had “a well balanced mind and was looked upon by those who knew him as a shrewd, smart businessman, very energetic and persistent in executing all his plans of action.” So radical was the change, that his friends could hardly recognize him. They sadly commented that “Gage no longer was Gage.” On the other hand, his old employers didn’t accept him back, as they “considered the change in his mind so marked that they could not give him his place again.” The problem was not his lack of physical abilities; it was his new character.

For Damasio, this history is significant since it implies that “somehow there were systems in the human brain dedicated more to reasoning than to anything else, and in particular to the personal and social dimensions of reasoning. The observance of previously acquired social convention and ethical rules could be lost as a result of brain damage, even when neither basic intellect nor language seemed compromised. Unwittingly, Gage’s example indicated that something in the brain was concerned specifically with unique human properties, among them the ability to anticipate the future and plan accordingly within a complex social environment; the sense of responsibility toward the self and others; and the ability to orchestrate one’s survival deliberately, at the command of one’s free will.”

The second case is one of Damasio’s own patients, whom he calls Elliot. Elliot was a successful businessman who had been diagnosed with a small brain tumor. During the operation, the neurosurgeon
removed the tumor but accidentally cut the connection between the frontal lobe (center for thought) and the cerebral amygdala (center for emotions). The results were as deep as they were surprising. On the one hand, Elliot was able to use his full intellectual faculties, which seemed to remain intact; on the other hand, he had become completely inept in his work and was unable to hold a steady job.

Damasio discovered the explanation to Elliot’s mysterious incompetence when he noticed something missing in the way Elliot spoke: he recounted the tragedies of his life with a coldness and detachment incompatible with the severity of the events. He always maintained control, and would describe the situations dispassionately, as if he was a spectator instead of a player. He showed no sense of his own suffering. Upon investigating this behavior, Damasio discovered that Elliot didn’t feel emotions. After the operation, nothing in life seemed to provoke an emotional reaction, no sadness, no impatience. He would on rare occasion display anger, but when he did, it was just a quick outburst and he immediately resumed his calm composure. In summary, Elliot could think, but he couldn’t feel.

Without feelings, Elliot couldn’t have preferences either, as he couldn’t attribute differing degrees of value to his various options. Without preferences, it was impossible for him to make decisions. For example, when Damasio asked him about scheduling his next interview, Elliot gave one long explanation about the pros and cons of all the possible hours in the following two weeks, but couldn’t decide which one was preferable to him. Damasio’s conclusion is that without an affective reference, it’s impossible to be rational. The rational center of the mind is able to generate a series of alternatives and arguments in favor of and against each one, but to decide, the mind needs to evaluate the emotional weight of each option and choose by way of feeling or intuition.

As Goleman says, “This sense of rightness or wrongness deep in the body is part of a steady background flow of feeling that continues throughout the day. Just as there is a stream of thought, there is a parallel stream of feeling. The notion that there is ‘pure thought,’ rationality devoid of feeling, is a fiction, an illusion based on inattention to the subtle moods that follow us through the day. We have feelings about everything we do, think about, imagine, remember. Thought and feeling are inextricably woven together.”

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The triune brain

Paul MacLean developed a theory on the human brain that has strongly influenced cognitive sciences.

“Man finds himself in the predicament that Nature has endowed him essentially with three brains which, despite great difference in structure, must function together and communicate with one another. The oldest of these brains is basically reptilian. The second has been inherited from lower mammals, and the third is a later mammalian development, which, in its culmination in primates, has made man peculiarly man.

“Speaking allegorically of these three brains within a brain, we might imagine that when the psychiatrist bids the patient to lie on the couch, he is asking him to stretch alongside a horse and a crocodile...The reptilian brain is filled with ancestral lore and ancestral memories and is faithful in doing what its ancestors say, but it is not very good for facing up to new situations [relatively low autonomy expressed in reflex and “instinctive” behavior].

“In evolution one first sees the beginning of emancipation from the ancestral [inflexibility] with the appearance of the lower mammalian brain, which Nature builds on top of the reptilian brain...Investigations of the last twenty years have shown that the lower mammalian brain plays a fundamental role in emotional behavior. It has a greater capacity than the reptilian brain for leaning new approaches and solutions to problems on the basis of immediate
experience. But like the reptilian brain, it does not have the ability to put its feelings into words.\textsuperscript{xxix}

The neocortex, where information is processed by the self-reflective mind, allows humans to consciously experience their emotional lives. In the normal course of events (as illustrated in Figure 2a), perceptions pass through the neocortex (or neomammalian brain), through the paleocortex (paleomammalian brain or limbic system) and finally arrive at the reptilian brain (brain stem) after having been processed by the upper layers. But in an "emergency" situation (as illustrated in Figure 2b), a short circuit takes place that bypasses the higher brains (neocortex and paleocortex) and goes directly to the most atavistic layers of the nervous system. From there, the only perceptions that appear are "friend" or "enemy" and the only options for behavior are fight or flight. Goleman calls this situation "emotional kidnapping." As we've seen in previous articles, conscious breathing is a way to avoid this short circuit and reconnect to the neocortex with our awareness. We might therefore say that the "price" of our "rescue" from emotional kidnapping is as inexpensive as air.
Figure 2a. The normal cycle of perception and behavior

- **Neocortex**: Symbolic thought; language; higher feelings; self-awareness.
- **Paleomammal**: Limbic system; visceral impulses; emotions (attraction, aggression, fear).
- **Reptil**: Sensorimotor; instinct (fight or flight); reflexes; visceral regulation.
- **Brain**
- **Behavior**
- **Perception**
- **Body**
Figure 2b. Short-circuit: emotional kidnapping

Emotional awareness

Automatic reactions are valuable for survival: they enable us to escape danger or attack prey. But the human emotional process doesn't end with mere instinctive or bodily changes. The cycle continues with the feeling (self-awareness) of the emotion and the mental inference of a connection between the emotion and its cause. This inference allows us to extrapolate from the situation and learn to avoid that which
causes us fear, although it can also lead to pathological over-generalizations developing into phobias. This capacity to feel our emotions, to be aware of them, allows us to be flexible in our responses, basing them upon the history of interaction we’ve had with similar situations.

For Damasio, this interaction between thought and primary emotion is the key to emotional maturity. Maturity requires joint action between the autonomic (involuntary) and somatic (voluntary) nervous systems. “Primary emotions (read: innate, preorganized, Jamesian) depend on limbic system circuitry, the amygdala and anterior cingulated being the prime players. (...) But the mechanism of primary emotions does not describe the full range of emotional behaviors. They are, to be sure, the basic mechanism. However, I believe that in terms of an individual’s development they are followed by mechanisms of secondary emotions, which occur once we begin experiencing feelings and forming systematic connections between categories of objects and situations, on the one hand, and primary emotions, on the other. Structures in the limbic system are not sufficient to support the process of secondary emotions. The network must be broadened, and it requires the agency of prefrontal and of some sensory cortices [thought].”

When our amygdala escapes the frontal lobe’s control, we are what Goleman would call “emotionally kidnapped.” During an emergency, the automatic reactions of our limbic system take control, trying to help us survive. This is useful when we encounter a dangerous animal and can react without much thought, but it’s very dangerous when we face an irate client. Hitting an attacking beast with a heavy stone might save our lives, but doing the same to a client rarely gives good results.

The regulation of these atavistic impulses is one of the basic emotional competencies of which higher thought is in charge. This type of thought is able to sophisticatedly discriminate between a productive response and a disastrous one, according to the relevant context. Someone that can control her emotions and use them intelligently (own them) has enormous competitive advantages over someone else who is controlled by his emotions (kidnapped by them).

The first step to taking ownership of our emotions is to become responsible for them. As we examined in Chapter 2, “Unconditional Responsibility,” on one level the emotion is a decision (conscious or unconscious) of the subject. Just as we decide to behave a certain way, we can also decide to have thoughts that promote specific emotions. Based upon his research in cognitive therapy, Dr. David Burns argues that emotional disorders are not of emotional origin; that the way we feel is a symptom and consequence of the way we think. The feelings of suffering which someone with depression experiences have for Burns as much causal impact on the depression as a “runny nose [has] when you have a cold.”

For Burns, the root of our feelings is in our thoughts. In the model we propose at Axialent, thoughts and feelings are connected in a circuit of double causality. What happens is that in many situations its better to use thoughts as a way of intervening to modify emotions and behavior. In these cases, the intervention suggested by Burns is exactly what we would suggest.
For example, illogically pessimistic thought plays a central role in the development of depression. Negative thoughts (illogical and useless) are always one of the causes of self-destructive emotions; and positive thoughts (logical and useful, although not necessarily happy) are always one of the causes of constructive emotions. This opens up the possibility of rationally designing moods; by modifying negative thoughts, it is possible to modify emotions. This modification, nevertheless, isn’t trivial. As we saw in Chapter 9, “Public and Private Conversations” (Metamanagement, Volume 2), most of the thoughts that get us in trouble are automatic and unconscious. In order to transform them it’s necessary to make them conscious and analyze them with the logic of rationality.

The following diagram summarizes the relationship between observations, interpretations and emotions:

![Diagram](image)

**Figure 3. Observations, interpretations, emotions and actions**

We perceive the external world through our primary senses (vision, hearing, touch, etc.), but immediately these perceptions are fed into the higher centers of our brain to be processed. These areas interpret the sensory data, compile an image of the situation and evaluate it with respect to our interests. Depending upon the results of this evaluation, we subsequently experience certain emotions and feelings. Finally, we act based on the observations, interpretations and emotions we hold in our awareness.

The case of hearing bad news is a clear example of how emotions depend on cognition. Suppose that a team has just lost a bid. Before learning this fact (which had already occurred) people felt anxious; afterwards, they felt distressed. Knowing the result doesn’t change anything in the state of the world, but it substantially changes the internal state of each person. If it turns out the competitor won by bidding so low that they’re now suffering heavy losses, perhaps these same people would even be content not to have won.
The external news is the catalyst, but it's not what determines the subsequent thought process and emotionality. Using our consciousness and free will, we can choose how to respond to the external event. There's a story from Eastern traditions that illustrates the importance of standing tall to maintain equanimity when facing life's circumstances. One day a farmer is walking through the countryside and happens upon a beautiful stallion. He manages to rope it and takes it home. Upon seeing it, the townspeople say: "You must be so happy for having found such a handsome horse. What good luck you have!" "Who knows" the farmer replies, "maybe yes, maybe no." Soon thereafter, while trying to tame the horse, the farmer's only son breaks his leg in a fall and the horse escapes. Upon hearing the news, the townspeople say: "You must be so sad for having lost your horse and for your son’s injury. What bad luck you have!" To which the farmer replies, "Who knows, maybe yes, maybe no." A short time later, war breaks out across the land and soldiers arrive, forcibly recruiting all the able-bodied men in the town, except the farmer's injured son. Upon learning this, the townspeople say to him: "You must be so happy because your son was not taken away. What good luck you have!" "Who knows" answers the farmer, "maybe yes, maybe no."

The emotional cycle

Throughout the day, we're subject to events and participate in situations that affect us bodily, intellectually and emotionally. These influences are catalysts for sensations, thoughts and feelings that, once processed by our awareness, lead to actions. When a person’s cognitive and emotional systems work in harmony, emotion is source of valid self-knowledge and a guide for effective action. Through our emotions, we discover what's happening to us and how we can respond to the situation while honoring our deep needs and interests.

Emotion is an instinctive energy – based upon interpretations we have of reality – which looks to express itself. When this energy is expressed productively, our body discharges and resumes its state of natural relaxation. When this energy is repressed, our body maintains a state of stress that prevents our optimal operation. If we accumulate this stress by repeatedly repressing our emotions, we face serious consequences: physical diseases – like hypertension, migraines, ulcers – and mental diseases, like depression, anxiety, phobias, explosions of irrational behavior, or alienating implosions.

The problems arise when emotions, instead being productively expressed, “short circuit” and create a vicious cycle of feedback with thoughts (see the dark arrow in Figure 3). In these cases, emotion influences thought, and thought, in turn, influences emotion. Thus, sadness can turn into depression, fear into phobia, irritation into resentment, guilt into compulsive remorse, shame into feelings of inferiority and desire into obsession. As Burns explains, emotional disorders are always a consequence (and a cause) of rational disorders. Once the vicious cycle is broken, it's possible to put this interpretive and emotional process back on track toward aims that serve the person’s life.
As an illustration, Burns presents the case of the Lethargy Cycle, whereby negative and self-defeating thoughts plunge someone into a state of depression and apathy. At the same time, these painful emotions convince the person that their pessimistic and distorted thoughts are valid. Self-defeating actions complete the vicious cycle, reinforcing the thoughts and emotions in a spiral of increasing suffering. The negative consequences of doing-nothingism make the problems even worse, adding additional negative thoughts, emotions and actions. If the person doesn't get out of this trap, he can end up in a deep depression and on the brink of suicide.

**Figure 4. The Lethargy Cycle**

- **Self-destructive thoughts**
  "There's no point in doing anything. I don't have the energy. I'm not in the mood. I'll probably fail if I try. Things are so difficult. There wouldn't be any satisfaction if I did anything anyway. I don't feel like doing anything, so I don't have to. I'll just lie here in bed, watching TV a little longer. Then I can sleep and forget about things. It's much easier. Sleeping is the best.

- **Self-defeating emotions**
  You feel tired, bored, guilty, apathetic, listless, discouraged, helpless, worthless, self-hating, impotent, and overwhelmed.

- **Self-defeating actions**
  You stay in bed, watching television or sleeping. You avoid people, work and all potentially satisfying activities.

- **Consequences of the lethargy cycle**
  You become isolated from the world and friends. This convinces you that you really are a loser. Your decreased productivity and seemingly permanent fatigue convinces you that you actually are inadequate. You sink deeper and deeper into an unmotivated state of paralysis. This validates and reinforces your self-defeating thoughts, feelings and actions. You remain trapped in a vicious cycle of desperation and depression.
Resolving emotional problems requires an act of consciousness and will. It’s impossible to improve the situation through unconscious actions. Widespread ignorance about the emotional processes has created two common myths. First is the idea that the “free expression” (explosion) of our impulses is productive. The second is the notion that the way to handle emotions is to repress them (implosion).

Impulsive passion isn’t synonymous with emotional intelligence. Somebody can give loose rein to her impulses without examining whether they are valid, congruent with her expressed values, or effective. These actions usually perpetuate the cycle of suffering, plunging her into a state of increasing frustration. For example, shouting at employees never solves the problem; on the contrary, it usually makes it worse. Once she discovers the risks of being out of control emotionally, she may over-compensate by thinking that repressing emotions is really what’s necessary. As a result, she develops an attitude of stoicism and impassibility.

But impassibility isn’t synonymous with equanimity. Somebody can remain impassible on the outside, and be boiling over with emotions on the inside. Pressure accumulates until a limit is reached and, dependent upon the person, he explodes or implodes. In Western cultures, exploding is the common route; in Eastern cultures, people normally implode. One is as bad as the other is. As Goleman says, “Imploders often fail to take any action to better their situation. They may not show outward signs of an emotional hijack, but they suffer the internal fallout anyway: headaches, edginess, smoking and drinking too much, sleeplessness, endless self-criticism. And they have the same health risks as those who explode, and so need to learn to manage their own reactions to distress.”

Controlling emotions is a dance of conscious expression, not a fight for domination or submission. Intelligently using emotional energy requires that we know it, understand its origins and respect its impulses, without betraying our most important values and objectives. Emotions are good advisors, but terrible masters. It’s useful to listen to them and attend to their requests, but without abdicating our responsibility to analyze the rationality of those requests and act with integrity.

Cognitive and emotional distortions

Healthy emotions are adequate responses to life’s circumstances. After suffering a misfortune, for example, it’s reasonable to feel irritated, try to resolve it and avoid similar situations in the future. If we learn of a loss, it’s reasonable to feel sad, mourn and heal the wounds. It’s perfectly healthy to feel fear at the chance of someone we love being hurt; that fear is the energy that protects what we value. It’s useful to feel guilty if we think we’ve done something wrong, since this guilt impels us to apologize and try to repair the damage. The problem arises when our thoughts undergo distortions that magnify our emotions to the point where they become pernicious, prevent all productive action and cause increased suffering.

When our emotions don’t flow into action, but negative thoughts instead, we enter the lethargy cycle
illustrated in Figure 4. Our thoughts generate stagnant emotions and the stagnant emotions generate stagnant thoughts, which in turn increase our stagnant emotions. This destructive cycle ends up becoming a persistently negative mind-set. The main difference between a negative mind-set and an emotion is that the emotion has a concrete cause: we were moved by something. For example, someone’s sad because he arrived late at the airport and missed his flight home to his family, or she’s upset because the car in front cut her off on a curve. A negative mind-set, however, doesn’t have a concrete reference: he feels that way, without reason. For example, someone is depressed or distressed. If somebody asks him why, his only answer is “I don’t know, I just feel depressed.”

As much as emotion is a flow and a movement, a negative mind-set is a reserve in rest; as much as emotion is like water that evaporates, creating clouds, falling as rain and fertilizing the earth, a negative mind-set is a motionless, stagnating pool of water. Like sitting water, a negative mind-set creates all types of emotional “rot.” Whereas emotion is warm and malleable, a negative mind-set is cold and rigid. Rage, for example, is hot and explosive like a lion, whereas hatred is icy cold and sly like a serpent.

Most negative mind-sets derive from:

- a) Sadness (depression, melancholy, resignation and pessimism);
- b) Fear (anxiety, distresses, phobia and hopelessness);
- c) Irritation (resentment, rancor, scorn and hatred);
- d) Guilt (remorse, shame, timidity and inferiority);
- e) Desire (obsession, greed, insatiability and repulsion);
- f) Boredom (disinterestedness, disconnection, apathy and alienation).

You have to find the emotional root of a negative mind-set in order to transform it. Once emotions freeze and stagnate, it’s impossible to change them. They’re rigid and brittle, having lost their malleability. If you try to force a change, it will probably destroy the structure of the personality. That’s why it’s crucial to go back to the origin of the mind-set and work with the emotional blockage that caused the stagnation. This block is generally a consequence of cognitive distortions and a lack of commitment to action. This commitment to action is a voluntary decision of the person. More than reasoning, action demands decision and energy. Like Nike’s advertising recommends, just do it.

Another critical factor for correcting emotional distortions is to understand and modify the cognitive distortions that underlie them. A fundamental competence in the world of emotions is being able to analyze thoughts and reject those that are illogical and counter-productive. The analysis of cognitive distortions is based on the concepts presented in chapters 10, “Observations and Opinions,” 11, “Expose and Investigate,” and 12, “Ladder of Inference.” Distorted thoughts are interpretations founded in or based on over-demanding parameters (for example, “a good mother never wants to be alone but rather always with her children”).
Some of the more common cognitive distortions that create emotional, behavioral and character problems are as follows (based on the work of David Burns\textsuperscript{xiii}).

1. Irresponsibility. In order to regulate emotions, one must assume 100% responsibility for creating them. Once we understand that our emotional states depend on our interpretation, we can see ourselves as players rather than victims of situations. Of course the outside world plays an important role in emotions, but what defines emotionality and behavior is one’s capacity to respond. We are not determined by our environment, rather we can use our free will to choose how to respond to each situation.

For example, if I say “your words upset me,” I’m marginalizing myself and losing power. A healthier interpretation (that moves me toward growth and well-being) is to say “when you interrupt me, I feel irritated.” Or, in spite of it being an unusual expression, I could also say “when you interrupt me, I choose to get upset.” Other common expressions that can be translated so that we take responsibility are: “it makes me sad” (to “I become sad when…”), “it scares me” (to “I feel scared when…”), “it makes me happy” (to “I feel happy when…”). This way of speaking about emotions allows a person to make emotions her own and gives her the power to influence emotions through her awareness. (See Chapter 17, “Multidimensional Communication.”)

2. Confusion. Statements like “I feel betrayed by my boss” or “I feel like we should have invited Pablo to the meeting,” demonstrate a serious confusion between emotions and interpretations. The problem with the first statement is that “betrayal” is an opinion, not an emotion. It would be more correct to say, “I think my boss betrayed me and as a result I feel sad and angry.” The problem with second statement is that “we should have” is a judgment, not an emotion. More correct would be to say, “I feel guilty because I think we should have invited Pablo to the meeting.” (The term “we should have” is in itself problematic, but we’ll look at this issue later.) This confusion between emotions and interpretations occurs frequently, since the verb “feel” is used indiscriminately to describe three different perceptions: a) sensations, such as “I feel hungry” or “I feel cold”; b) emotions, like “I feel afraid” or “I feel happy”; and c) thoughts, like “I feel that Alberto is the best candidate” (opinion), or “I feel like you don’t pay attention to me” (inference).

3. Extremism. Sometimes we tend to evaluate things as all or nothing, where we only see black or white, without any grays in between. For example, one might think: “I’m a total failure because I didn’t get that promotion I was hoping for.” This is the basis of a perfectionism that creates rigidity and stress. Some people are afraid of committing errors or being imperfect, because it implies (through their own logic) that they are a failure or loser with no redeemable value. Instead of thinking dichotomously, it’s far more useful to consider reality to be a spectrum of shades. Nobody is a 100% failure or 100% success; we all experience successes and failures. With this understanding, one could reformulate the opinion: “I feel sad because I didn’t get the promotion I hoped for, but on the other hand I have been promoted three times in the last three years. Some you win, some you lose, that’s life.” Nonetheless, anyone caught in a vicious cycle thinks that if they’re not all successes, then they all must be failures.
4. **Over-generalizing.** Another tendency is concluding that when something bad happens, it will always happen and always has happened. As these incidents create discomfort, one feels irritated, worried and depressed. For example, upon finding out that a supplier was late with a delivery, someone might think: “It’s always the same, nobody respects me and they never fulfill the promises they make to me.” A little bit of reflection, nevertheless, might uncover many situations when people fulfilled their promises. Over-generalization is what brings about the persistent pain of rejection. Without over-generalization, a personal affront produces temporary pain, but it doesn’t become a serious and continued cause of pain. For example, a manager that doesn’t receive an awaited pay increase thinks: “I’m never going to be recognized, companies don’t care about their people and I’m always going to be disregarded; it’s useless, I shouldn’t even bother trying…” Her distorted conclusion is that, because she hasn’t gotten a raise this time and in this company (and despite all the other raises and promotions she’s previously achieved), she might never get another raise, in this or in any other work. (See the section about optimists and pessimists in Chapter 5, Volume 1, “Mental Models.”)

5. **Negative Skewing.** Another propensity is to choose a negative detail of a situation and focus on it so much that one concludes that the entire situation is negative. For example: the boss asks a question during a presentation and the presenter thinks “I’m being ridiculous, nobody understands anything; my boss is confused,” forgetting that for the past half an hour everyone has been quietly agreeing and expressing comprehension with their gestures. Negatively skewed thinking is like watching the world through lenses that filter all the positive and only let the negative through. Because these “glasses” are unconscious, everything in life looks negative. This creates severe distress.

6. **Magnification.** This tendency takes negative skewing to a whole other level, where one magnifies an unpleasant element of a situation and turns the entire thing into a misfortune. Continuing with the previous example, the presenter might think: “Oh no, my boss is confused. This is horrible. My reputation is ruined forever. They’re going to fire me without even a letter of recommendation.” With magnification, the lenses of negative skewing become magnifying lenses. A more balanced perspective about the situation might lead to thinking, “My boss is confused, but I can resolve her doubts. It’s not so bad to dialogue about the unclear points in the presentation. Up until now, everybody seems to have understood what I presented.”

7. **Disqualifying the Positive.** This is the propensity to disqualify a positive and transform it into a negative. It’s the interpretative opposite of King Midas’s touch. Instead of turning anything touched (with thought) into gold, everything touched becomes lead. Consider the way many people qualify any praise that comes their way. Appreciation for a well-done task might be disqualified immediately by thinking “he’s just trying to get on my good side or make me feel good, he doesn’t really believe that.” Acting this way ensures a dark and heavy life, like the lead. One becomes incapable of appreciating the good things and remains trapped in feeling of permanent misery.
8. Extra-Sensory Perceptions

a. **Mind Reading.** This is the tendency to assume that other people are being disparaging or belittling, with such surety, that one don’t even bother to verify it. For example, a client doesn’t show up on time and someone thinks: “He’s not interested in me, he didn’t even bother to call and cancel the meeting because I don’t matter at all to him.” (We’ve already seen in Chapter 12 of Volume 2, “Ladder of Inference,” the facility with which the mind can jump to unfounded conclusions that seem completely solid.)

b. **Fortune-Telling.** This is the tendency to make negative projections about the future, taking them as fixed and unchangeable truths; imagining that something bad is going to happen and taking that image as a fact, even if it’s unrealistic or unfounded. For example, in the middle of an anxiety attack, one might think “My company is bankrupt, I’m never going to get my clients to accept the conditions I need to survive.” Another example is someone who leaves for tomorrow what she could do today, because she thinks that “finishing this work would be such a drag and boring I get tired just thinking about it” and postpones the effort until the situation becomes critical. This type of thinking creates lethargy, hopelessness and depression, and it becomes a self-fulfilling prophecy.

9. **Emotional reasoning.** This is the tendency to consider our emotions as supporting evidence for our own and other’s opinions, using them as the basis of reasoning. The risk is that if the opinions are distorted, we don’t give any validity to our emotions. For example, somebody might think: “I feel inferior to my co-workers, therefore I must be inferior to them,” or, “I’m angry with my employees, therefore they must have done something bad,” or, “I feel resigned and hopeless, therefore my problems must be unsolvable.” Emotional reasoning is the clearest case of the depressive vicious cycle: negative thoughts create negative emotions, and the negative emotions create more negative thoughts. The result is that one feels trapped with no way out.

In interpersonal relations, emotional reasoning is devastating. It’s impossible to talk intelligently about a problem when one of the speakers is convinced of a truth, based on his emotional reasoning. A typical example is that of a domestic dispute. “You treat me poorly,” she says. “What did I do to you now?” he asks. “You make me feel bad,” she answers. “But I didn’t do anything to you,” he protests. “If you hadn’t done anything to me, I wouldn’t feel bad,” she triumphantly concludes. “You can’t deny my emotions. I feel bad and it’s because you treat me poorly.” By now, the outlook for the conversation (and the marriage), are in no ways encouraging.

If this couple operated with emotional intelligence, the dialogue would be quite different. “I feel sad,” she says. “What’s going on?” he asks. “It seems to me that we’re spending less and less time together. I miss you,” she answers softly. “I hear you and I’m sorry. It hurts me that you’re sad. I feel like we’re a little distant, too. Maybe we’re not putting aside the time we deserve for ourselves. Do you have a suggestion?” “We could reserve two nights a week for us. No work, no friends, no children. Let’s go out as
if we were dating again.” “I love the idea. Let’s try it and see what happens.”

10. Should Statements. This is the tendency to think in terms of obligations instead of possibilities. This is when someone consistently imposes expectations on him or herself and the world. It is an interpretation of desires in terms of what one should or shouldn’t do or say. For example, someone thinks: “I should try harder at selling,” or, “I shouldn’t have said that in the meeting.” These thoughts create guilt, stress, shame and resentment; paradoxically, one ends up rebelling against these oppressive “mandates” and feeling apathetic and unmotivated. At the same time, when someone turns these “should” thoughts on others, he sets himself up for his own disillusionment and frustration. For example, thoughts like “He should have warned me about the delay in delivering the report,” or, “she shouldn’t have given her report without my approval,” promote a permanent state of indignation and recrimination.

To correct these thoughts requires translating the “should-be” to “could-be” or preference. For example, instead of “I should try harder at selling,” someone might think “Things could be a lot better if I really put my mind to improving my sales.” Instead of “I shouldn’t have said what I did,” “What I said seems to have been counter-productive; I’m sorry I said it. I want to apologize and try to repair the damage as well as learn to keep my cool in the future.” Guilt, as a useful emotion, warns us that we’ve violated our own limits or that we’ve behaved in a way that we ourselves feel is unproductive. When this happens, the virtuous choice is to apologize, correct the error and learn from the experience.

The translation from should-be to could-be is analogous the way a mediator works. For example, instead of resentfully thinking “He should have warned me about the delay in delivering the report,” one could say, “I would have preferred that he warned me about the delay, but he didn’t. What can I do now to express my dissatisfaction and request that this doesn’t happen again?” Or, instead of someone bitterly brooding “She shouldn’t have given her report without my approval,” he could accept his pain and plan a way to improve the situation by thinking “it bothered me that she gave the report without my approval, since I was expecting to participate. I would have preferred that she consulted me, but she decided not to. Maybe I could ask her what she thinks about my participation.” Anger, as a useful emotion, warns us that someone has stepped beyond our boundaries and caused damage. When this happens, the virtuous choice is to productively complain (as I discussed in chapters 16 and 17 of Volume 2, “Recommitment Conversations” and “Multidimensional Communication”).

11. Labeling and Mislabling. This is the tendency to label oneself and others. It’s when someone reflects on something negative that happened and extrapolates it to entirely define the person that did it. For example, someone doesn’t feel satisfied with the quality with her project and says to herself, “I’m a failure, I was born to lose,” instead of “I’m not satisfied with my work on this project, but that doesn’t define who I am.” Or, if someone is irritated with a client and thinks “He’s an insolent jerk, there’s no way to deal with him,” instead of “I don’t know how to handle this situation, I don’t know how to effectively respond to this client’s demands.” Labeling is irrational and counter-productive. When applied to ourselves, we create feelings of inferiority and shame; applied to others, labeling create hostility and
conflict. A person’s essential identity cannot be equated to a specific thing he or she does. What someone does only shows the result of 1) how he interpreted – through his highly conditioned mental model – the limited information he had about a situation in that moment, and then 2), how he chose to act according to his own internal emotional and intellectual logic. With more information, different emotions, less cognitive distortions or a slightly different mental model, he might choose differently. Life is a complex flow and continuous exchange of thoughts, emotions and behavior, which is why it’s impossible to define it with a label.

These eleven basic cognitive distortions are the source of most of the suffering, poor communication and emotional conflict. By learning to identify, analyze and correct them, it’s possible to significantly increase the emotional intelligence coefficient of people, teams and organizations.
References

i Daniel Goleman, *Emotional Intelligence* and *Working With Emotional Intelligence*; (New York: Bantam)


iii ibid., p. 31.

iv ibid., p. 11.


xi ibid., p. 128.

xii ibid., p. 53.

xiii ibid., p. 7.

xiv ibid., p. 8.

xv Quotation from Dr. John Harlow’s report on Gage, Antonio Damasio, *Decartes’ Error*; op. cit. p. 8

xvi ibid., p. 8.

xvii Antonio Damasio, *Decartes’ Error*; op. cit., p. 10.


xxi ibid., pp. 86-7.


xxiii David Burns, *Feeling Good*; op. cit., pp. 32-43.

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