

The subject of my project is, in its most basic terminology, emotion. Specifically, I delved into Lisa Feldman Barrett's examination of traditional emotion theory, the most common perception of emotional experience, and her intention to discover a resolution to the emotion paradox. The "emotion paradox" is a term that describes our common experience with emotion despite its contradiction in modern scientific explanation. Past experience allows for the brain to create emotions and construct meaning in what is around you. The brain is provided with information from the body and it finds the best way to help the entire body thrive. It helps us understand the world; involuntarily and without actual conscious thought, the brain decides how we feel and how we should react in our environment to survive. The way the brain constructs instances of emotion is reliant on the culmination of interoception, concepts, and social reality. Interoception is, simply put, whatever feelings and sensations are provided by your body. Concepts are related to our understanding of the world. Social reality is the culture one is surrounded by. This means that emotions are a response to certain stimuli in an effort to protect us. This theory of constructed emotion provides an explanation for universal emotional experiences.

This photo-installation represents aspects of constructed emotion: pleasure, displeasure, arousal, and calmness. In an effort to depict the contradiction between having a deeply felt emotional experience and the simultaneous need to hide it from others, I took digital self-portraits of two portions of my face—the mouth and the eyes—often understood to be representative of how one feels. I layered a number of portraits over each other to create a composite image. My emotional state shines through in some portions of the composite images but, to some degree, remains ambiguous by the muddled overlap of images.

The significance of color choices and facial expression is important because of their commonly understood relationship with emotional experience. For example, red is often associated with pain or anger. The photos express a personal vulnerability that I otherwise don't express in my everyday life; they are an effort to better understand and respect myself. We can choose to express ourselves emotionally; this means there is potential for growth and the opportunity to foster a personal sense of vulnerability.

Owen R.  
Maine

You Probably Don't Understand  
Emotion as Well as You Think  
You Do

Owen R.



*This paper exists because of uncertainty and indecisiveness; if not for a number of occurrences somehow coordinating to bring me to the topic, I would not have discovered this information unless by accident and would not have written nine pages about it either. My interest is in discovering what truly dictates my emotions and, therefore, how I can better understand myself and my thoughts. Traditional views on emotion seem misleading and untrue based on how many are taught to understand emotion and how I have come to understand and find interest in this topic previous to the introduction of the project, and with no plans, until I began working to investigate and explore the complexities of the emotional mind.*

Running around on a playground once upon a time, I had ample opportunity for the rambunctious and risky behaviors that I so deeply enjoy. As I played with my companions at the time, identical twin girls, I decided to jump down the set of dusty, black, child-sized playground stairs — the kind with those large perforations perfect for getting one’s finger stuck in —, swinging down the handrails — the ones that screech from the friction of hands sliding down them — all the way down to the woodchips below. I suggested that they try it too because, well, “it was fun!” One decided to give in to my suggestion, except upon trying she got hurt, the impact having broken her ankle. The positive emotion that came with my own leap was then balanced by the emotion I felt based upon the fact that my recommendation had prompted her actions. I felt responsible and guilty because of her injury; however, I also decided that it wasn’t my fault, for she had made the decision and failed to do it properly, and perhaps would have tried even without me saying anything.

This early experience interests me because, throughout my life, the activities often deemed foolish or too risky have been the most fun to me. When there’s an element of danger or the “necessity” for care to be taken when trying something, I tend to find it much more enjoyable than other activities. I use that phrase “been the most fun to me” interchangeably with “generated a positive emotional response.” To me, that begs the question of how language influences the way each of us experiences emotion. I used “fun” or “exciting,” very nonspecific words in the English language which did technically get my point across. Perhaps a more accurate yet still concise way to describe the emotion would be found in another language, like French. It seems to me as though a word like *frisson*<sup>1</sup> would do a much better job at defining my emotional response.

When someone is aware of different words that define more accurately how they feel, it allows them to have a better understanding of how to specifically explain what it is they’re feeling. Maybe the best way to describe my emotional response to what I was about to do and then what my friend was about to do in that situation would actually be better defined in German — by the noun, *Herzklopfen*<sup>2</sup>, for instance — because the experience was all anticipation, excitement, and apprehension. This word is especially effective when you consider the initially positive outcome followed subsequently by the negative overall outcome of a broken bone. Undoubtedly, my heart started to beat a little faster before I jumped; exhilaration taking over my brain as I launched my very small body down the stairs. And watching someone *else* then do the same jump? How could my heart not have thumped in excitement for what was to come yet again?

How can one juxtapose personal emotional experience and the scientific understanding of emotions? What is the emotion paradox, and why has it perplexed researchers for so long? What is a potential resolution? How does language impact our understanding of emotion?

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How is it possible that there are emotions universal to the human condition — such as sadness or anger — but each remains so generally nonspecific to the anatomy of the brain? The emotions exist in people’s experience but are not identifiable as specific events in the brain, yet everyone learns to understand about emotions the same way. This is the crux of the emotion

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<sup>1</sup> Noun. Definition: “A sudden feeling of thrill, combining fear and excitement.” (“The Positive Lexicography Project.” Lexicography. Accessed November 30, 2018. [https://hifisamurai.github.io/lexicography/.](https://hifisamurai.github.io/lexicography/))

<sup>2</sup> Noun. Definition: “Lit. ‘heart-knock’; the thumping of the heart in anticipation of something good (or bad) happening.” (“The Positive Lexicography Project.” Lexicography. Accessed November 30, 2018. [https://hifisamurai.github.io/lexicography/.](https://hifisamurai.github.io/lexicography/))

paradox, and it's been an inexplicable source of confusion to researchers since the concept was first discovered. The term was coined in 2006 by Lisa Feldman Barrett, a University Distinguished Professor of Psychology at Northeastern University, focusing on the study of emotion, in her effort to resolve this scientific uncertainty. She has since pursued this resolution, researching and trying to discover how we might understand emotion scientifically in a way that actually correlates with our individual understanding of personal emotions. My belief is that the experience of emotion has to do with brain development. The development of the human brain requires human experience which only occurs because of the brain's capabilities. "A brain is a network of billions of communicating neurons, bathed in chemicals called neurotransmitters, which permit neurons to pass information to one another."<sup>3</sup> These neurons and neurotransmitters are necessary to allow brain activity in various parts of the brain which play different roles in how the brain works. Neural impulses and the thought associated with corresponding language allow us to share how we feel with language. This language describes the sensations we experience which create neural impulses and enable an understanding of the natural feelings our bodies provide.

The emotion paradox is a term referring to the lack of connection between the "experience of emotion" and the "science of emotion." People tend to know their experiences with emotion and therefore have the ability to describe their feelings using certain terms that categorize our feelings, like, for example, a time they felt happy or sad. However, our emotional experiences don't coordinate with any scientific discovery of the same universal phenomenon. Barrett stated the following, "People believe that they know an emotion when they see it, and as a consequence assume that emotions are discrete events that can be recognized with some degree of accuracy, but scientists have yet to produce a set of clear and consistent criteria for indicating when an emotion is present and when it is not." To restate this concept, people seem to understand each other's emotions but there is no way to tell surely what an emotion is for there is no "standard" feeling. This is because "our everyday experiences of anger, sadness, fear, and several other emotions are compelling, but they are scientifically elusive and defy clear definition."<sup>4</sup> As stated, despite our direct and obvious experiences with these specific and seemingly universal emotions, they remain unproven and entirely individual when considered in the brain. It is not only Barrett who notes this observation; other scientists have made the same discovery: "The paradox of emotions is that, on the one hand, they seem self-evident and obvious when examined introspectively; on the other hand, they have been extremely difficult to define in objective scientific terms. Attempts to achieve a consensus definition that is accepted across fields from neuroscience to psychology to philosophy have repeatedly failed."<sup>5</sup> While people experience the emotions they are made aware of so clearly and distinctly, these emotions fail time and again to become objective yet each of us still does experience such feelings in a similar sense.

Most people believe humans seem to share the experience of similar emotions and understand when another is feeling a certain emotion. Six basic emotions established by

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<sup>3</sup>Barrett, and Lisa Feldman. "Theory of Constructed Emotion: An Active Inference Account of Interoception and Categorization." OUP Academic. October 19, 2016. Accessed November 30, 2018. <https://academic.oup.com/scan/article/12/1/1/2823712>.

<sup>4</sup> Barrett, Lisa Feldman. 2006. "Solving the emotion paradox: Categorization and the experience of emotion." *Personality and Social Psychology Review*, 10: 20-46

<sup>5</sup> Anderson, David J., and Ralph Adolphs. 2014. "A framework for studying emotions across species."

professor and psychologist Paul Ekman<sup>6</sup> in the 20<sup>th</sup> century - happiness, sadness, anger, fear, disgust, and surprise - have remained the most commonly accepted ways to understand what we and those around us are feeling. Soon after Ekman, another professor and psychologist named Robert Plutchik<sup>7</sup> identified eight emotions, grouped into four sets of opposites. These emotions are joy and sadness, anger and fear, trust and distrust, and, finally, surprise and anticipation.<sup>8</sup> The belief was that each set of emotions, with two opposite emotional responses, are among those which one experiences when confronted with certain situations. When we go about our lives every day, the brain responds to everything around in an effort to protect us. Ekman and Plutchik believed these emotions were a distinct, hardwired part of the brain — basic, instinctual, emotional responses to stimuli. For example, when something surprises or scares you, you might respond quickly without a thought as your brain does its best to protect you. Emotions might seem complex to investigate but pretty easy to understand. However, they are not that simple and everyone seems to have a unique relationship with emotion.

Your first assumptions as to what in your brain allows for and creates emotion may abide by the classical view of emotions that affirms there are a number of specific emotions universal to human nature. This means that — according to Lisa Feldman Barrett’s research — the “brain comes pre-wired with neurons dedicated to a specific emotion, and that they’re triggered by something that happens in the world, going off like a little bomb. The neurons, once triggered, produce a fingerprint that identifies the emotion — like a specific facial expression that is universally recognised.”<sup>9</sup> Modern researchers often voice their discontent with this model of emotion; clearly, you can’t truly tell what someone is feeling from their “recognizable” facial expression. This is because not everyone emotes in the same manner and one can learn how to emote in a certain way by practicing how to act as such. We give emotions physical meaning that doesn’t exist without culture. Drawing from Barrett’s findings, “Physical movements have no intrinsic emotional meaning. We have to make them meaningful. A human or something else has to connect them to the context, and that makes them meaningful. That’s how we know that a smile might mean sadness and a cry might mean happiness, and a stoic, still face might mean that you are angrily plotting the demise of your enemy.”<sup>10</sup> Essentially, the research on physical expression and internal emotion shows very little connection beyond the ability of the brain to connect reality with context. Basic emotion theory was a start to the long process of uncovering the workings of emotion in the brain but wasn’t particularly accurate when one is aware of the more modern neuroscience which proves otherwise.

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<sup>6</sup> Paul Ekman is an American psychologist and professor emeritus at the University of California, San Francisco who is a pioneer in the study of emotions and their relation to facial expressions. (“Paul Ekman.” Wikipedia. October 18, 2018. Accessed November 30, 2018. [https://en.wikipedia.org/wiki/Paul\\_Ekman](https://en.wikipedia.org/wiki/Paul_Ekman).)

<sup>7</sup> Robert Plutchik was professor emeritus at the Albert Einstein College of Medicine and adjunct professor at the University of South Florida. He received his Ph.D. from Columbia University and he was also a psychologist. (“Robert Plutchik.” Wikipedia. July 31, 2018. Accessed November 30, 2018. [https://en.wikipedia.org/wiki/Robert\\_Plutchik](https://en.wikipedia.org/wiki/Robert_Plutchik).)

<sup>8</sup> “What Are Basic Emotions?” Psychology Today. Accessed November 30, 2018. <https://www.psychologytoday.com/us/blog/hide-and-peek/201601/what-are-basic-emotions>.

<sup>9</sup> Bryce, Emma. “How Emotions Are ‘made’: Why Your Definition of Sadness Is unlike Anyone Else’s.” WIRED. March 21, 2017. Accessed November 30, 2018. <https://www.wired.co.uk/article/lisa-feldman-barrett-emotions>.

<sup>10</sup> Barrett, Lisa Feldman. “Transcript of “You Aren’t at the Mercy of Your Emotions -- Your Brain Creates Them.”” Ted. Accessed November 30, 2018. [https://www.ted.com/talks/lisa\\_feldman\\_barrett\\_you\\_aren\\_t\\_at\\_the\\_mercy\\_of\\_your\\_emotions\\_your\\_brain\\_creates\\_them/transcript?language=en#t-737412](https://www.ted.com/talks/lisa_feldman_barrett_you_aren_t_at_the_mercy_of_your_emotions_your_brain_creates_them/transcript?language=en#t-737412).

Considering the lack of actual evidence supporting the traditional view of emotions, along with the attentive study of what can be observed in oneself and others emotionally, the opinion that basic emotion theory was inaccurate seems true. Furthermore, according to Barrett, “When I observe other people and myself, I realize that I don't have one distinct sadness, for instance; I have an entire vocabulary of sadness. I don't have one happiness, one feeling of awe, or one feeling of gratitude; I have many. And they're each highly specific to the situation.”<sup>11</sup> This seems to indicate that emotions range significantly depending on context: where you are, who you're with, what's happening around you. It means emotions aren't as distinct as we sometimes think they are. Additionally, Barrett said, “It may feel to you like your emotions are hardwired and they just trigger and happen to you, but they don't. You might believe that your brain is prewired with emotion circuits, that you're born with emotion circuits, but you're not. In fact, none of us ... have emotion circuits in our brain. In fact, no brain on this planet contains emotion circuits.”<sup>12</sup> Those emotions that scientists like Ekman and Plutchik thought were a part of the brain are — it turns out — not there and never have been. Emotions are not built into your brain so much as built by experience. Because of this, there is much potential for emotional complications of an otherwise simple reaction to what one might experience.

Since my first memorable instance of emotional recollection (that fateful day at the playground), my awareness of what I feel has been a consideration and compartmentalization;<sup>13</sup> emotions are something to *deal* with, to wrestle into submission in an effort to come to a place of calm and acceptance of the manner in which they manifest. When I feel something negative, my reaction is to conceive of what can be done to amend what I'm feeling; when I feel something positive, my goal is to identify the source of that feeling and keep in mind how I can experience the sensation again. I always thought I understood emotions and was capable of dealing with any feeling, confused when someone was in an uncontrollable bout of feeling. As I began to research emotions for this paper, I came to a new realization: emotion isn't necessarily about conceptualization in the sense of trying to subdue emotions and decide what and how to feel. The way we experience emotions is based entirely on the emotion concept that forms the backbone of our understanding of what we feel. Emotions are dependent on our past experiences.

When I have conversations with people about the overarching subject of emotion, often my perception of emotions and manner of “dealing” with them differs from theirs. People who feel certain emotions intensely and have a tough time coming to terms with what they're feeling have, at times, asked me how I am seemingly so unbothered. I don't necessarily feel proud of this, nor is it something that seems “cool,” but often I feel glad because I am able to deal with my emotions so efficiently and seemingly without issue. When feelings completely possess my conscience, I tend to decide they are a waste of time when I could be productive rather than just feeling. This is a different manner of thinking about feelings, deeply rooted in how I learned and was taught about my personal emotional intelligence from experience, explanation, and advice.

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<sup>11</sup> Bryce, Emma. “How Emotions Are ‘made’: Why Your Definition of Sadness Is unlike Anyone Else’s.” WIRED. March 21, 2017. Accessed November 30, 2018. <https://www.wired.co.uk/article/lisa-feldman-barrett-emotions>.

<sup>12</sup> Barrett, Lisa Feldman. “Transcript of “You Aren't at the Mercy of Your Emotions -- Your Brain Creates Them”.” Ted. Accessed November 30, 2018. [https://www.ted.com/talks/lisa\\_feldman\\_barrett\\_you\\_aren\\_t\\_at\\_the\\_mercy\\_of\\_your\\_emotions\\_your\\_brain\\_creates\\_them/transcript?language=en#t-737412](https://www.ted.com/talks/lisa_feldman_barrett_you_aren_t_at_the_mercy_of_your_emotions_your_brain_creates_them/transcript?language=en#t-737412).

<sup>13</sup> “Compartmentalization is a subconscious psychological defense mechanism used to avoid cognitive dissonance, or the mental discomfort and anxiety caused by a person's having conflicting values, cognitions, emotions, beliefs, etc. within themselves.” “Compartmentalization (psychology).” Wikipedia. October 15, 2018. Accessed November 30, 2018. [https://en.wikipedia.org/wiki/Compartmentalization\\_\(psychology\)](https://en.wikipedia.org/wiki/Compartmentalization_(psychology)).

An example of how this might manifest itself is as follows: “Some people experience crippling anxiety before a test. Based on past experiences of taking tests, their brains predict a hammering heartbeat, sweaty hands, so much so that they are unable to actually take the test. They don't perform well, and sometimes they not only fail courses but they actually might fail college. But here's the thing: a hammering heartbeat is not necessarily anxiety. It could be that your body is preparing to do battle and ace that test.”<sup>14</sup> Our emotional responses to the world around us are dictated by past experiences. Since I had few to no truly negative experiences as a child, very little traumatic potential, I often find very little reason to panic over what I'm experiencing. As I experience more and more, these experiences might present themselves in such a way that my emotional perception and ability to deal with what I feel will change. Already, this has happened due to experiences in recent years. When I was younger, my emotions were more certain and less complicated.

When we're young, our perception of things remains simple and based upon simple feelings that come from physiology research, these being “feelings like calmness and agitation, excitement, comfort, discomfort.” These feelings are how we react and understand what's happening to us physically. However, “they have very little detail, and you need that detail to know what to do next,” as Barrett says, “What do you do about these feelings? And so how does your brain give you that detail? Well, that's what predictions are. Predictions link the sensations in your body that give you these simple feelings with what's going on around you in the world so that you know what to do. And sometimes, those constructions are emotions.”<sup>15</sup> Similarly, from Irene Lyon, “from the start, we know when something isn't right, it is built into us, it is our protection. As we get bigger, and as we have to deal with “adult-life” we start to ignore these internal sensations... – this, to sum up bluntly – makes us very sick and disconnected.”<sup>16</sup> This disconnection is unintentional and a societal norm. People who act upon gut instinct are often seen as less worthy of respect because of their “lack of logical decision making.” This is how feelings and thoughts coordinate; we feel situations and think about them in the same way, unless one employs metacognitive thinking strategies. This ability to feel and understand based on what's going on in your body is the basis for gut feelings. This ability is lost as we age because everyone must learn how to “fake it” to act acceptably in most social settings. Before this project, I didn't think about the complexity of emotions as much or know anything regarding the topic other than my own experience with both my own and others' emotions. As I researched the topic, I found previously unknown perceptions and understandings of emotion and our brains.

The 2014 textbook “Discovering Psychology” by Don Hockenbury and Sandra E. Hockenbury defines “emotion” as “a complex psychological state that involves three distinct components: a subjective experience, a physiological response, and a behavioral or expressive response.” A seemingly more accurate definition can be found in Barrett's theory of constructed emotion. Similarly, the theory of constructed emotion states the following: “In every waking

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<sup>14</sup> Barrett, Lisa Feldman. “Transcript of “You Aren't at the Mercy of Your Emotions -- Your Brain Creates Them”.” Ted. Accessed November 30, 2018. [https://www.ted.com/talks/lisa\\_feldman\\_barrett\\_you\\_aren\\_t\\_at\\_the\\_mercy\\_of\\_your\\_emotions\\_your\\_brain\\_creates\\_them/transcript?language=en#t-737412](https://www.ted.com/talks/lisa_feldman_barrett_you_aren_t_at_the_mercy_of_your_emotions_your_brain_creates_them/transcript?language=en#t-737412).

<sup>15</sup> Barrett, Lisa Feldman. “Transcript of “You Aren't at the Mercy of Your Emotions -- Your Brain Creates Them”.” Ted. Accessed November 30, 2018. [https://www.ted.com/talks/lisa\\_feldman\\_barrett\\_you\\_aren\\_t\\_at\\_the\\_mercy\\_of\\_your\\_emotions\\_your\\_brain\\_creates\\_them/transcript?language=en#t-737412](https://www.ted.com/talks/lisa_feldman_barrett_you_aren_t_at_the_mercy_of_your_emotions_your_brain_creates_them/transcript?language=en#t-737412).

<sup>16</sup> Lyon, Irene. “Bad Situations Are Felt, Not Thought: Belly versus Brain.” Irene Lyon. October 29, 2014. Accessed November 30, 2018. <https://irenelyon.com/2010/12/08/bad-situations-are-felt-not-thought-belly-versus-brain/>.



moment, your brain uses past experience, organized as concepts, to guide your actions and give your sensations meaning. When the concepts involved are emotion concepts, your brain constructs instances of emotion."<sup>17</sup> Past experience allows for the brain to create emotions and meaning in what is around you. All the brain is provided is the information from the body and it has to find the best way to help the entire body thrive. It helps us understand the world; involuntarily and without actual conscious thought, the brain decides how we feel and how we should react in our environment to survive. The way the brain constructs instances of emotion relies on important "ingredients" coming together: interoception, concepts, and social reality. To begin with, interoception is "the ability to actually sense the internal milieu of our body, the ability to be sensitive to the stimuli – the stressors, both good and bad – that originate "INSIDE" the body."<sup>18</sup> Essentially, interoception is what we call the ability we possess to feel sensations in our body that are sent to the brain. Concepts refer to emotion concepts, the words that dictate our understanding of what we are feeling. Instances of emotion often range greatly in complexity, and this is entirely based on the social reality we experience constantly. Social reality is what dictates our lives externally; how society works around us. These three come together to dictate what we feel based on how we perceive what is around us, what we actually physically feel, and what emotion concepts relate to how we feel and what is occurring.

We are able to conceptualize emotions because of affective feeling. Affect is possible because of our interoceptive abilities and emotions stem from the affective sensations of "pleasure, displeasure, arousal, and calmness."<sup>19</sup> Concepts come into play as cultural embodied knowledge, including emotion concepts. Finally, social reality provides "collective agreement" and, in my opinion most importantly, language. Language is the force that makes understanding emotions popular within a culture. This is why emotions have such a distinct cultural basis and why various cultures often have not only completely unique emotions, but different stresses on how emotions are felt. To further establish what this means, "emotions are commonly thought of as discrete and distinct — fear, anger, happiness — while affect (produced by interoception) is continuous. The theory of constructed emotion suggests that at a given moment, the brain predicts and categorizes the present moment via interoceptive predictions and the emotion concepts from one's culture, to construct an instance of emotion, just as one perceives discrete colors. This process instantiates the experience of "having an emotion"."<sup>20</sup> As we feel emotion based on personal brain development, interoception, and cultural development, our emotions emerge based on what we know and have experienced, and how we know to describe what we feel. Our verbal understanding and description of emotions continues to build upon itself as we grow to understand new methods of emotional understanding. These can come in the form of new words previously unknown which allow us to feel more specifically a certain emotion as exposure to any such term increases.

This becomes all the more complex when one considers just how much there is to draw from and the fact that our emotional responses are dependent on what we have experienced in the past. Any number of examples can be provided to aid in understanding this; if you were to decide

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<sup>17</sup> Barrett, Lisa Feldman (2017). *How Emotions are Made: The Secret Life of the Brain*. Houghton Mifflin Harcourt.

<sup>18</sup> Lyon, Irene. "Bad Situations Are Felt, Not Thought: Belly versus Brain." Irene Lyon. October 29, 2014. Accessed November 30, 2018. <https://irenelyon.com/2010/12/08/bad-situations-are-felt-not-thought-belly-versus-brain/>.

<sup>19</sup> "Theory of Constructed Emotion." Wikipedia. November 16, 2018. Accessed November 30, 2018. [https://en.wikipedia.org/wiki/Theory\\_of\\_constructed\\_emotion](https://en.wikipedia.org/wiki/Theory_of_constructed_emotion).

<sup>20</sup> "Theory of Constructed Emotion." Wikipedia. November 16, 2018. Accessed November 30, 2018. [https://en.wikipedia.org/wiki/Theory\\_of\\_constructed\\_emotion](https://en.wikipedia.org/wiki/Theory_of_constructed_emotion).

to walk to a coffee shop, knowing on the way there that your goal was to have a cup of warm coffee and a delicious baked good, your brain would begin to send messages to your body that food and drink were coming soon and your stomach might begin to “rumble” as you begin to look forward to consuming these items. You would feel the sensation of hunger and your body would be entirely ready to eat. Now, imagine you pick up your phone after a while to five missed calls and a text from someone you care about saying they’re in an emergency. You would, without a doubt, get that same weird sensation in your stomach. However, this time around, the sensation would be relevant to a completely different emotional response, but the same experience of interoception would be present. This is just one small and brief example of the possibility of confusion in the brain when trying to configure an emotional response in a split second. This is because, as Lisa Feldman Barrett states, “...emotions are guesses. They are guesses that your brain constructs in the moment where billions of brain cells are working together, and you have more control over those guesses than you might imagine that you do.” Not only does your brain guess in an effort to present you with the most accurate emotional prediction of what’s to come, but you have some degree of control over how you perceive emotions. Emotions aren’t necessarily reactions, they are predictions. When we feel a certain emotion, it is because the brain is attempting to piece together based on external stimuli a prediction so that it can react fittingly.

Intuition is a survival instinct designed to best predict the right decision to make based on every past experience and scrap of information ever processed by the brain. “Intuition or gut feelings are also the result of a lot of processing that happens in the brain. Research suggests that the brain is a large predictive machine, constantly comparing incoming sensory information and current experiences against stored knowledge and memories of previous experiences, and predicting what will come next. This is described in what scientists call the “predictive processing framework.” This ensures that the brain is always as prepared to deal with the current situation as optimally as possible. When a mismatch occurs (something that wasn’t predicted), your brain updates its cognitive models.”<sup>21</sup> To be blunt, this means that the brain does the best it can to subconsciously predict any potentiality and situate you the best it can. That means that sometimes trusting that instinct and relying on intuition to make decisions can be the best way to do so.

Humans have involuntary reflexes associated with certain past experiences. Typically, this reflex is completely irrational but when the brain experiences stimuli similar to what was previously indicative of, for example, a traumatic experience, and it feels the same emotion it did in that moment. Essentially, the brain has memory fragments and when these aspects of an experience are summed up a specific feeling is created. This is where the concept of a “gut feeling” comes into play. Gut feelings are designed because your brain’s goal is to maintain your safety. The brain remembers elements and recognizes feelings and essentially presents some type of message in an attempt to ensure survival by expressing feelings of, for example, fear associated with a known danger from a previous experience. Another way to put it: “Our brains record it all; every meeting, client interaction, presentation, and personal decision. With every experience, the cache of information our brains have at their disposal grows. Think of a jigsaw puzzle. Your brain's job is to decide what the image is, but it only has one of the 100 pieces to the puzzle. With every relevant experience, another puzzle piece becomes available. Soon, the

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<sup>21</sup> Mulukom, Valerie Van. “Is It Rational to Trust Your Gut Feelings? A Neuroscientist Explains.” The Conversation. September 19, 2018. Accessed November 30, 2018. <https://theconversation.com/is-it-rational-to-trust-your-gut-feelings-a-neuroscientist-explains-95086>.

brain will have enough information to identify the image.<sup>22</sup> Therefore, a gut feeling is a “shorthand average of wisdom from past experience,”<sup>23</sup> and it certainly isn’t something tangible and, importantly, describable when experienced in the moment.

Assuming the understanding of emotion represented throughout this paper so far is correct, what we feel is entirely dictated by interoception, concepts, and social reality. As far as I can tell, interoception occurs naturally and social reality isn’t remotely individual. Therefore, concepts are the only of all three aspects with which we can alter our emotional perception beyond taking into consideration social reality and interoception while feeling certain emotions. This indicates that when we run into new emotion concepts, our manner of experiencing emotion can change and develop based on these new concepts. If one learns a new word describing more specifically the emotions they then are able to realize they feel naturally, they have a much more perfect way to describe what they are feeling. It seems impossible to perfectly put into words what one feels. However, as one begins to understand more numerous emotion concepts as they discover previously unknown language, it stands to reason that their emotional intelligence would increase as their ability to understand and clarify personal emotion increased. As I researched, I discovered many instances of new language more accurately describing how I have felt in the past.

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“It isn’t for sure, but I applied for a job at Outward Bound up in Maine. We would move there if they decide to hire me for the position.”

It wasn’t exactly these words, but something along those lines — with a lot more specific information — when my dad told me that it was probable we would leave the boarding school I had grown up on and would quite possibly be attending in the upcoming fall. We had a long conversation about how I would feel and what could happen. I had “moved” before, sure, but not really, certainly not like this. Moving between faculty housings about a hundred yards apart was nothing like the move we were about to make. I had absolutely no idea how to feel. Initially, I was crushed; I had been excited to attend high school in the area and continue developing relationships with the people who all felt so familiar. Now, out of the blue, I was headed to an entirely new place, filled with entirely new people. Besides short visits with old friends, I would be leaving them and my life behind in Massachusetts. We moved just after I finished Middle School, concluding eighth grade. I could describe my simple, basic emotions; *I’m sad and I’m going to miss my friends. I’m mad that you decided to do this* (“you” being my parents). *I’m confused and uncertain about what’s to come.* What complicated my emotional response was the fact that I had no idea what was to come. That uncertainty and fear presented itself for the first time and I had no way to put my feelings into words and I certainly didn’t want to burden my parents with my qualms, despite their repeated insistence that I express how I was feeling about it.

So, I continued to tell myself to just “be fine;” telling myself to trust that everything would turn out alright. My parents provided reassurances and made sure I could stay in touch with my now “old” friends, visiting and catching up. That is how I coped with my feelings and dealt with that which I couldn’t put into words initially. All I could express were my concrete

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<sup>22</sup> Browning, Geil. “Why Trusting Your ‘Gut Feeling’ Is Often the Best Strategy.” Inc.com. July 23, 2015. Accessed November 30, 2018. <https://www.inc.com/geil-browning/go-with-your-gut-trusting-your-intuition.html>.

<sup>23</sup> “Choice | Radiolab.” Wnycstudios. Accessed November 30, 2018. <https://www.wnycstudios.org/story/91640-choice>.

feelings of sadness or anger. When school started, I had to make new friends. I had to establish myself and grow as a person. Looking back, the experience did force me to grow. Two years later, I'm glad we moved to Maine and glad that I made the friends I did. I'm glad I attended the school I did and that my application to The Oxbow School in Napa was a result of where I was and who I was around, as I more likely than not would never have done so otherwise.

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While my linguistic skill did allow me to express myself to a certain extent and I definitely felt specific emotions because of what I was experiencing in the process of moving, I could never truly put my feelings into words. There weren't words that I had understood before the experience capable of properly explaining what was in my brain. Because I couldn't put it into words, the lack of connection between what I felt and the words most used to describe feelings made my emotions feel vague and made me all the more uncertain. How could I not know what I was feeling? In hindsight, this experience forced me to reconsider the common conviction about emotion as something discrete and specific and pre-wired in the brain; instead, I feel as though each new experience allows me to learn my emotional response just as moving helped me understand the emotions people often associate with such an event. My research assisted in my understanding of this as well; when I looked more into cultural differences and representation of emotion in different languages, I discovered terminology such as *tizita*<sup>24</sup> and *ambientamento*,<sup>25</sup> nouns from Amharic and Italian, respectively. It helped me to discover how that experience and everything my brain associates with it will dictate my understanding of the world around me in the coming future. This realization is important because it holds true in any situation irrelevant to that example. The importance of language to emotion is paramount; when we develop emotions as our brains develop from childhood, we learn our cultural emotionality in the form of emotion concepts and, as our understanding begins to apply to our affect, produced by interoception, the three culminate to form emotional experience.

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<sup>24</sup> Noun. Def: A bittersweet remembrance and longing for a time, person, thing gone by. ("The Positive Lexicography Project" Lexicography. Accessed November 30, 2018. <https://hifisamurai.github.io/lexicography/>)

<sup>25</sup> Noun. Def: Settling-in; acclimatisation; adjustment. ("The Positive Lexicography Project." Lexicography. Accessed November 30, 2018. <https://hifisamurai.github.io/lexicography/>)

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