

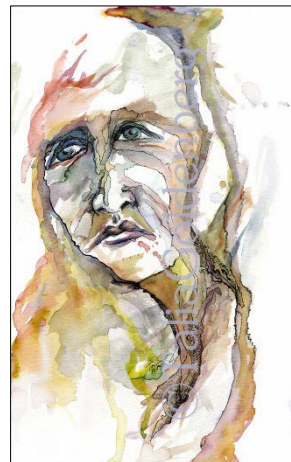
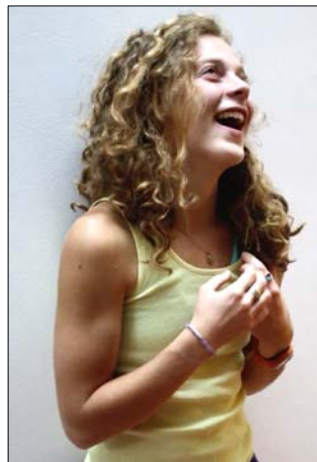
## Emotions and Moral Judgments: I feel, therefore I am?

### **I. Preamble: Consider Two Different Cases**

Case 1: A 23 y.o. female is admitted for an elective cervical spinal fusion. An incision is made towards the posterior cervical spine and metal screws ranging from 8mm to 20mm are inserted to fasten a plate to the skull. Rods are drilled into sides of vertebrae and connected to the plate. Surgery is completed in 4 hours and 27 minutes. Post-surgery, patient is transferred to the ICU due to reported difficulty in breathing. Later, hospital staff respond to a Code Blue but are unable to intubate patient. Patient is in comatose state for nine days before being taken off of life support. Patient is pronounced dead 20:41 February 20. (Baker 2017).

Case 2: Talia Ranit Goldenberg is a larger-than-life 23 year-old; she is Talia the innovator, Talia the expressive artist, Talia the scrappy athlete, Talia the big sister, Talia the uninhibited and whimsical spirit. Native to Eugene, Talia grew up in the PNW playground as a gymnast, a gutsy skier, a formidable soccer opponent, and a track star. Her childhood was marked with a mixed bag of injuries ranging from blood in her urine to an underdeveloped jaw to three successive ACL tears. It wasn't until Talia turned 20, that her diagnosis of Ehler's-Danlos Syndrome made sense of her loose, unstable joints and her insistent pain. In February 2014, Talia met with renowned neurosurgeon, Dr. Johnny Delashaw of Seattle's Swedish Medical Center, to discuss an elective cervical spinal fusion that would stabilize her vertebrae. This surgery would improve her quality of life and her medical vitality qualified her for the procedure. The surgery was scheduled for February 10 and though it was unclear which portions of the surgery were actually carried out by Dr. Delashaw, things seemed to go according plan. Unfortunately, Talia felt

negative impacts of the surgery almost immediately and reported difficulty breathing. Her father, Jeff, was a family medicine doctor and advocated for his daughter. He voiced that a cricothyrotomy would be necessary if things became worse as Talia's recently fused spine would render the standard intubation nearly impossible. Dr. Delashaw seemed dismissive of their concerns and even noted, "Patient better" in Talia's chart before jetting off to California for a Neurology conference. On February 11, Talia managed to squeak out, "Help me! I can't breathe!" before medical staff responded to a Code Blue. ICU staff both attempted and failed to place an oxygen mask as well as various sizes of airway devices. They did not have access to a cricothyrotomy kit. Surrounded by distraught friends and family, Talia fell into a coma. After nine days, she was taken off life support and she eventually passed away at 10:41 pm on Thursday, February 20. (Baker 2017).



**Talia Ranit  
Goldenberg**  
1990-2014

Art (on right) is titled "Off in the distance" from the ONWARD series (Goldenberg).

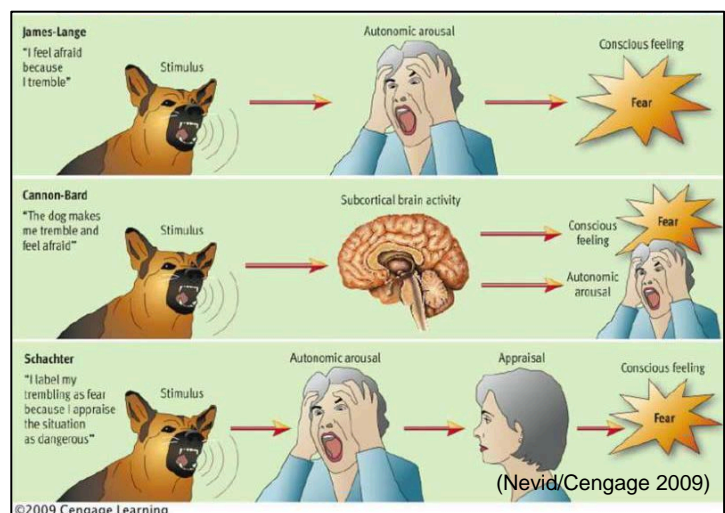
The differences between case one and case two are striking. Case one is a detached monologue. Accurate, yes, but this description is void of emotion and is merely a sketch of a person that once was. Case two, on the other hand, introduces us to the 3+-dimensional human spirit that made Talia, Talia. Though still constrained by the inadequacy of meager words, we are reminded that she was a human being made up of the exact same matter found in Giant Sequoias, tsunami waves, and supernovae. If we pause, we can still hear her generous peals of laughter and feel her magnetic blue eyes.

These salient features make it hard to believe that case one and case two describe the same events, let alone the same Talia. I would argue that inclusion of these details is absolutely essential in doing the story of Talia justice. To brush these emotional truths under a legal rug, is to lie. We should not be permitted to ablate the very emotions that differentiate the human condition from the existence of a packing peanut, no matter the context. Emotion deserves some semblance of a seat at the decision-making table and we are now left to qualify where on the spectrum, from highchair to throne, we ought to place emotion.

## II. Equating Theories of Emotion to the Process of Reasoning

Early conversations about emotion date back to Darwin's 1872 treatise, which cites similar emotional expressions across the globe as evidence for an evolutionary emotional theory (LeDoux 2012). Research by prominent Psychologist Paul Ekman identifies six universal emotions (anger, sadness, disgust, happiness, fear, and surprise) and supports Darwin's claims (Ekman 1992). Advances in technology soon spurred the identification of the limbic system and allowed researchers to define emotion as, "(a) a temporary experience with positive or negative or mixed qualities (b) a motivation to behave in a certain way and (c) passions that you feel, rather than states you can totally control" (Nevid 2013). Critical to understanding emotion itself, is the investigation into how emotion is

perceived. Early researchers William James and Carl Lange proposed that a stimulus evokes autonomic arousal (increased heart rate, palms sweating, etc.), which in turn causes the subjective feeling of emotion (Plutchik 1980). Walter Cannon and



Philip Bard questioned the James-Lange theory and suggested that a stimulus results in the simultaneous evocation of autonomic arousal and subjective emotion. More commonly accepted, however, is Stanley Singer and Jerome Schachter's two-part theory of emotion. In this model, introduction of a stimulus results in autonomic arousal, followed by appraisal, and finally the subjective experience of emotion. Though the aforementioned theories are not to be mistaken for an exhaustive list of theories of emotion throughout history, the James-Lange, Cannon-Bard, and Schachter-Singer theories are three of the more prominent approaches to understanding emotion.

All three different theories can be applied directly to moral reasoning. The table outlines where emotional and rational judgement would fall when considering Moral Issue A. While some may be skeptical of the relevance of emotional theory in addressing the

	<b>Process of Moral Reasoning as Explained by Theories of Emotion</b>	question of how
<b>James-Lange</b>	Moral Issue A → Reasoning Y → Emotional Response X	emotion should
<b>Cannon-Bard</b>	Moral Issue A → Emotional Response X Moral Issue A → Reasoning Y	shape moral
<b>Schachter-Singer</b>	Moral Issue A → Reasoning Y → Appraisal → Emotional Response X	reasoning, I would argue that the

understanding of basic emotional perception precedes our ability to use emotion as a tool. Applying theories of emotion to practical applications of emotion is analogous to extrapolating our knowledge of numbers to how we write dates or tell time. Consequently, "Moral Issue A" can replace the stimulus of emotional theories, "Reasoning Y" can be substituted for autonomic arousal, and "Emotional Response X" can take the place of the subjective experiences of emotion.

### **III. Schachter-Singer Theory as the Preferred Explanation of Moral Reasoning**

The Schachter-Singer emotional theory is the most relevant emotional theory to apply to moral decision-making. In this condition, we first approach moral issue A with

reasoning Y. Our reasoning must be as objective as possible and should be an, “argument that denotes a patterned set of assertions: at least one statement providing support for another statement” (Vaughn 19). Next, we diverge from the James-Lange approach and are charged with appraisal of reasoning Y. In this phase, we subject reasoning Y to the scrutiny of others. This could take the conventional Western form of peer-reviewed academia or the untraditional wisdom of a collective community. Both, or a fusion of both, are equally valid. Appraisal could call for repeated revision of reasoning Y until the appraisal process deems reasoning Y “significantly different” or “worthy” of *proscription*. These proscriptive reasoning Ys are now accepted standards across whichever community accepted them. The last string in the Schachter-Singer process guards individual relativism. Here, a personal emotional response X can cause an individual to independently diverge from reasoning Y. The truth of emotional response X cannot be refuted as autonomy to subjective emotional responses is what constitutes fundamental personhood. Though emotional responses can be used to justify individual choice, they are neither transmissible nor *proscriptive*.

#### IV. Counterarguments in Favor of James-Lange or Cannon-Bard Approaches

Counterarguments could be constructed in favor of the James-Lange or Cannon-Bard lens of moral decision making. If we were to assume that the James-Lange approach cuts ice, however, we run into two fundamental problems. Firstly, if reasoning Y takes place independently of and prior to emotional response X, we risk the grayscale detachment that was illustrated in the text of case one. Secondly, if we allow emotional response X to retroactively sway our initial reasoning Y, we undermine the integrity of reasoning Y. A James-Lange approach also put us in danger of Haidt’s

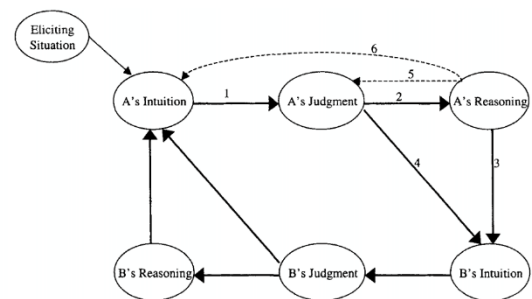


Figure 2. The social intuitionist model of moral judgment. The numbered links, drawn for Person A only, are (1) the intuitive judgment link, (2) the post hoc reasoning link, (3) the reasoned persuasion link, and (4) the social persuasion link. Two additional links are hypothesized to occur less frequently: (5) the reasoned judgment link and (6) the private reflection link. **Haidt 2001**

Emotional Dog and Its Rational Tale, in which “moral reasoning is an ex post facto process used to influence the intuitions” (Haidt 2001). Haidt’s social intuitionist model outlines post hoc reasoning compensating for preliminary intuition and judgement. In this model, Haidt also recognizes the reasoned persuasion link that perpetuates the cycle and allows A’s reasoning to transfer to B’s intuition.

When we examine the counterargument that supports Cannon-Bard moral decision making, we are vulnerable to failure of criterion III of Vaughn’s evaluation of moral theories. In this case, Moral Issue A could lead us to emotional response X that is galaxies away from reasoning Y. What do we do when these outcomes antagonize each other? Opposition in the Cannon-Bard model leads us straight into a checkmate. If we decide to prioritize emotional response X over reasoning Y, then we have essentially recreated a James-Lange approach with its own host of issues. If we decide to stomach simultaneously holding two conflicting views, we fail Vaughn’s criterion III of resourcefulness in moral problem-solving (Vaughn 49). A guiding theory that leads us with two equally weighted answers does not help us solve moral problems.

## **V. Counterargument against the Schachter-Singer Approach**

Though my previous arguments rated the Schachter-Singer theory of emotion as the most applicable to moral reasoning, it is also important to consider the shortcomings of this construct. The Schachter-Singer theory of emotion hinges on the appraisal period, in which responses to the autonomic arousal system are processed. While in theory, the appraisal period allows emotionality to engage rationality in dialogue, the two systems exist in distinctive dimensions that are separated by both time and space. Emotional processing primarily occurs in the amygdala and can transpire on the magnitude of milliseconds in monkey brains, while rational deliberation takes place over an extended period of time within an integrated network that includes the posterior dorsolateral

prefrontal cortex (DLPFC), mid-DLPFC, posterior dorsal anterior cingulate cortex (ACC), and anterior dorsal ACC (Pessoa 2010; Banich 2009). It seems that these physiological limitations would prevent interactions between emotional feeling and rational thought. This complicates the validity of and potentially the application of the Schachter-Singer theory to moral decision-making.

While I am willing to concede that the Schachter-Singer theory of emotion has its own deficiencies, my intended application of the theory is not contingent on acceptance of the Schachter-Singer model as the prevailing theory of emotion. Rather, I am advocating for the use of the appraisal-based model as a tool that helps us better approach decision-making. Regardless, the Schachter-Singer theory remains one of the most prominent theories of emotions. It rekindled the link between cognition and emotion and has led to extensive research on diverse topics ranging from obesity to psychopathy to dissonance. Since being published in 1962, however, critics have weakened the emphasis on arousal as a necessary prerequisite for an emotional state (Reisenzein 1983). This critique applies equally to the James-Lange and Cannon-Bard theories of emotion, but is not catastrophic to the legitimacy of the Schachter-Singer theory. The appraisal aspect, in which one differentiates between the pleasant or unpleasant and the favorable or unfavorable, keeps the theory afloat. The University of Amsterdam's Nico Frijda stands by this component of the Schachter-Singer theory and writes, "we feel a state of emotion because an appraisal has generated some change in action readiness...on the whole, cognitive theory from Schachter and Singer onward, was correct in emphasizing cognitive factors complementary to appraisal" (Frijda 1989). Though certainly not perfect, the Schachter-Singer theory of emotion is both unique and sound in its description of appraisal and change readiness. Since this appraisal period is also the strongest proponent of applying

Schachter-Singer to moral decision-making, the model can be used to address realized ethical dilemmas in both broad terms and in specific niches, like that of medical ethics.

## **VI. Emotions, Moral Dilemmas, and Physician Assisted Suicide**

In application of the Schachter-Singer theory to the specific issue of Physician Assisted Suicide (PAS), we *proscribe* appraised and community reviewed arguments based on reasoning. It is up to the respective community, be it at a state level or a larger medical field, to deem which rational arguments are sound and which arguments fall short. It is essential that the appraisal process reflect vigorous attention to detail. In community acceptance of reasoning Y, we are agreeing to the social implications of John Rawls' Contractarianism (Cudd 2017). We strive to maximize joint interest and trust that the community is not motivated by tainted self-interest. Finally, we respect the right of individuals to have independent emotional responses. This is crucial to the application of Schachter-Singer theory to PAS as it recognizes the Kantian intrinsic worth within human beings. Who am I to say that you do *not* feel angry or sad or any of Ekman's other universal emotions? While we do not condone transmission of emotional responses as premises, we are understanding of people that choose to make personal decisions that differ from community reasoning. In regards to PAS, this means that we hold empathy for those that choose to provide or seek PAS even in states or legal climates that do not *proscribe* it. Though emotional responses do not claim to protect individuals from legal ramifications (or other socially agreed upon consequences), they do provide the foundation for respect.

Quill provides anecdotal support for a Schachter-Singer based model of PAS in his experience with Diane, a patient with terminal cancer. Quill denotes that Diane had a 25 percent chance of survival, yet wanted to refuse induction chemotherapy treatment for her acute myelomonocytic leukemia. At the time, PAS was not legal. Quill's extensive



relationship with Diane, however, caused him to act outside of the legal bounds. He writes about his decision, “Diane taught me about the range of help I can provide if I know people well and if I allow them to say what they really want. She taught me about life, death, and honesty and about taking charge and facing tragedy squarely when it strikes” (Quill 1991). In this case, Quill has respected Diane’s emotional responses enough to realize that they outweigh the *proscribed* reasoning.

## **VII. Conclusion**

In closing, completely disregarding the validity of emotions in decision-making is rash. Allowing emotion into the realm of the rational is admittedly problematic, however, as emotions are experienced subjectively and in varying intensities and morphologies. Applying the Schachter-Singer theory of emotion to our moral reasoning process allows us to best appraise *proscriptive* reasoning before using our emotions to decide whether or not we are personally comfortable taking action. With this in mind, emotion is permissible for a private decision about ethical dilemmas, including PAS, but is not a valid premise that holds standing over others. The Schachter-Singer viewpoint carves out space for patients to voice irrefutable emotion, pain, and feelings. Though Descartes may or may not have approved of the modified mantra “*Sentio, ergo sum*”, believing in the sentiments of “I feel, therefore I am” defends patients like Talia, when she rasps, “Help me! I can’t breathe!”

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