Part I

THE BASICS OF CRITICAL FEELING

INTRODUCTION

Ever since Plato introduced his allegory of the charioteer, where one horse is passion, the other is motivation, and the charioteer is reason, thinkers have captured conduct of life as a conflict between passion and reason. Theorists distinguished between human nature, which acts on impulses, and acts derived from reason-based morality (see Dewey 2012/1922). Humans often act on impulses that do not comply with what they themselves think would be best. Some eat too much, drink too much, or have romantic adventures they later regret. People who forget about the consequences of their actions and act based on their feelings may experience unsatisfactory results. For example, couples divorce due to a shattered relationship despite the shattered finances that follow suit. On the other hand, decision makers sometimes know that a course of action may have disastrous consequences if they follow their gut feeling. That is why employees do not walk away from their job when they are angry at their boss. Sometimes, however, it is good to act on gut feelings. For example, job applicants *feel* negatively about an option they *think* would be best. That is why people may reject a job offer that would yield a higher income and better career prospects; they feel uncomfortable at the job interview, a sign that the job has some drawbacks. Finally, although attitudes have been defined as consisting of cognitive, affective, and behavioral components (Krech, Crutchfield, and Ballachey 1962; Rosenberg and Hovland 1960), there is ample evidence for a lack of correspondence among these components of attitudes (Wicker 1969; Zanna and Rempel 1988). For example, people think of themselves as environmentalists but drive cars, produce unnecessary garbage or fly to distant conference destinations to give speeches about how to curb climate change.

This lack of agreement between thought and feeling that precede action raises several questions. How can we keep our impulses in check? When can we trust our gut feelings, and when not? How can we align feeling with thought and vice versa? Finally, how could we learn to use our feelings in order to act according to our values and the values of our community? These are the questions I address in this book.

Historically, this problem has been solved in two different ways. The most dominant solution in the West since the Enlightenment has

consisted of excluding feelings as a guide to actions (see Lerner, Li, Valdesolo, and Kassam 2015; the notable exception was David Hume 1888/1738). According to the Western standards of optimal thought, people must analyze the consequences of an action in order to arrive at a reasoned decision. Cutting feelings out and acting on what reason tells us are preferred to acting impulsively based on feelings. This led to normative rules of inference and moral reasoning (e.g., Kant 2011/1785; Mill 2002/1863; Rawls 1971) and to models of moral development based on reasoning capacities (e.g., Kohlberg 1981). This solution denies the possibility that feelings ever lead to better outcomes than thinking. However, as we shall see by the end of Chapter 1, this approach is insufficient because feelings are always with us, and they have adaptive functions that we can exploit. Feelings can be seen as a source of information that may assist thought in determining the best course of action.

A second solution for optimizing the outcomes of actions was developed by the Chinese philosopher Confucius (551–479 BCE). His thoughts are collected in the *Analects* (Slingerland 2003b). Confucian ethics assumes that people have a natural inclination toward moral behavior that has to be refined through repeated practice of traditional cultural forms, including rituals, music, and readings of moral maxims. According to Confucian thought, repeated practice leads to information being processed more easily and to the feeling that that information is correct and pleasant (Reber and Slingerland 2011). These observations suggest that Confucian virtue ethics is psychologically feasible. Similarly, Aristotle (384–322 BCE), most prominently in his *Nicomachean Ethics* (Aristotle 2004/ca. 350 BCE), emphasized that virtuous action does not only include proper thought but also the right feeling (see Sherman 1989). For example, the act of giving money to the poor while feeling contempt for them would not qualify as virtuous.

Based on this old solution to the problem of how to spontaneously perform the right action, this book introduces the term *critical feeling* as a complement to critical thinking. In analogy to critical thinking, which is the strategic use of reasoning in order to optimize an outcome, critical feeling denotes the strategic use of feelings in order to optimize an outcome. Such outcomes may be happiness, mastery of a skill, true love or friendship, profit, the best outcomes for a community or state, or the realization of a spiritual or religious ideal. Critical thinking is aimed at bringing thought and action in line with each other. Yet people do not only want to do what they think is best; they want to feel good when they think and act well. A good life therefore means that thought, feeling, and action are in harmony with each other (Annas 2011; Fowers 2005) and

with personal and communal values. That is why we need to introduce critical feeling.[1]

The main purpose of the book is to outline the theoretical foundations and some practical examples of how people can optimize feelings in order to act in accordance with their personal or community values. When individuals are able to achieve this feat, thought, feeling, and action are brought into agreement, and people enjoy doing the right thing (see James, 1985/1902).

The examination of critical feeling requires contributions from three disciplines: philosophy, psychology, and education. When the philosopher Kristján Kristjánsson (2013) discussed the virtue-ethical underpinnings of positive psychology, he compared the tasks of the three fields in providing excellent virtue education to three neighbors who go on a duck-hunting party. One neighbor owns the gun, another brings the ammunition, and the third has hunting expertise. In Kristjánsson's view, the virtue ethicists provide the gun (the overarching theory), the psychologists the ammunition (the empirical evidence necessary to implement virtue ethics), and the educators the know-how about hunting techniques (the knowledge of how to impart moral practices). He claimed that the psychologists have been the weakest member of the hunting party. The same analogy can be applied to critical feeling. Philosophers provide an overarching theory; they theorize about educational aims, values in science, morality, and the epistemology of thinking and feeling. Psychologists provide the empirical evidence for the effectiveness of strategies that employ feelings to optimize outcomes. Finally, education researchers provide the know-how on how educators, both parents and teachers, can instruct students regarding critical feeling. Educators need to assess how critical feeling might enter school curricula; how to implement various educational aims, such as improving results on standardized tests, educating for the economy, and educating for care; how critical feeling fits school as an institution; and whether critical feeling would change educational policy. Finally, educational psychologists could provide evidence-based means to teach critical feeling to students of all ages. This provides a distribution of tasks where communities determine the desired values. Philosophers examine the normative issues, such as the nature of values or the nature of understanding emotions. Philosophers therefore explore, based on the values of a community, the right things to do. Psychologists deliver empirical evidence for how to achieve the desired ends with the right means. They explore how to do things right. Finally, educators put the implementation of values through evidence-based strategies into practice. They teach people both what the right thing is and how to do it

right. This procedure to achieve optimal outcomes applies to both critical thinking and critical feeling.

As a psychologist, I shall focus on the psychological aspects of critical feeling. However, I cannot write a book on evidence-based practices in the use of feelings without considering critical thinking, raising questions about values in science and in education, discussing the rationality of feelings, or asking how critical feeling could be implemented at home and at school. Despite my focus on psychological research, I shall develop the connections of the concept of critical feeling to the other members of the imaginary duck-hunting party. Philosophy and education, however, will only be discussed to the extent needed to embed or to apply the findings from psychology.

This approach has a positive side effect: If we embed empirical psychology in the philosophy of education, theory of science, and ethics, we get a more broadly supported psychological science than when psychologists work in isolation. Some colleagues in humanities tell me that most psychological studies are insipid and uninspiring. Often enough, psychologists cite nobody other than psychologists, which leaves their work uninformed by broader scholarship. It is a "psychological science illusion" to think we can conduct research in moral psychology without a background in moral philosophy; political psychology without political science; educational psychology without educational theory or history; empirical aesthetics without philosophical aesthetics; or cognitive science of religion without religious studies. Some scholars in the humanities conclude that psychology has nothing to offer to their field; an early example is George Dickie (1962), who claimed that empirical aesthetics has no relevance to art. One reason, to be discussed in more detail later, lies in the fact that psychologists examine supposedly universal laws of the mind when it might be more relevant to consider the historical and cultural context.

While I can understand the lack of enthusiasm in the humanities for some of the research that goes under the flag of psychological science, I think empirical studies in psychology – if embedded in an appropriate theoretical framework – have much to offer the humanities and arts (see Slingerland 2008). This is an emerging trend, as shown by new journal titles such as *The Review of Philosophy and Psychology* (founded 2010) and *Religion, Brain & Behavior* (founded 2011); edited books that bring together scholarship from philosophy, the arts, psychology, and neuroscience (e.g., Currie, Kieran, Meskin, and Moore 2014; Schellekens and Goldie 2011; Shimamura and Palmer 2012); and thematic issues of journals in the humanities, such as a special issue of the journal *Religion* on "Evolutionary Approaches to the Study of Religion." Some of my own

work in the past few years has been aimed at embedding psychological findings in a wider theoretical context (Bullot and Reber 2013a; Reber 2008; Reber and Slingerland 2011; Reber and Unkelbach 2010). In this spirit, I will outline in rough strokes both the philosophical background in which the empirical studies relevant to critical feeling are situated and the implications of these observations for educational practice.

The book has two parts. The first part deals with the basics of critical feeling. Chapter 1 is dedicated to critical thinking. Critics of the critical thinking movement lament the absence of moral values as a criterion for good thinking. I therefore sketch arguments for how such values can be connected to critical thinking. This outline will prepare the ground for the discussion of similar problems when it comes to critical feeling. The chapter ends with ten reasons why critical thinking is not enough and why we need critical feeling as a complement. Before critical feeling can be introduced, we need to review the different kinds of feeling, and this is done in Chapter 2. The chapter ends with a discussion of the rationality of feelings, which is the foundation of the proficiencies that constitute critical feeling. Chapter 3 is the core chapter of this book in that it introduces critical feeling, defines its proficiencies and different strategies, delineates how it could serve values, and distinguishes critical feeling from other concepts, such as the rationality of emotion, emotional competence, emotional intelligence, positive psychology, and mindfulness.

The second part of the book, Chapters 4 to 10, will discuss the different domains in which critical feeling can be applied, such as well-being, skill learning, social interaction, business and politics, school, art, and religion and morality. When describing strategies of critical feeling, I rely on empirical evidence, mainly from psychology but sometimes also from sociology, political science, or history. Where there are gaps in empirical evidence, I discuss predictions derived from theory or from empirical evidence for a related phenomenon.

Woven into some chapters is a discussion of fundamental ideas relevant to critical feeling. The chapter on well-being discusses the notion that many desired states are by-products of actions performed for their own sake. Such states cannot be achieved strategically. The chapter about sensory and bodily feedback reviews evidence that every cognitive process is affectively colored – there is a feeling behind every thought. The ubiquity of feelings reveals the importance of making use of them through critical feeling. The chapter on business and politics touches critical theory – how could critical feeling be used to effect the emancipation of the disadvantaged and oppressed? This perspective complements perspectives seen in textbooks and marketing journals that provide

recommendations on how businesspeople can persuade customers. The chapter on art discusses a recent framework for research on art appreciation that has deep consequences for how we understand feelings related to art. The final chapter asks how we could reverse disenchantment stemming from the progress of understanding the workings of nature. Such re-enchantment might be gained by reinvigorating literal belief in holy scriptures, as evangelical churches do (see Luhrmann 2012). Yet many people reject forms of re-enchantment that are based on ignoring the scientific worldview. Therefore, we have to ask which strategies help believers find a sense of awe and sanctity.

The chapters in Part II begin with a short introduction of a viewpoint – often derived from philosophy – that demarcates the values that will be considered. It follows a review of empirical findings about strategies we could use to optimize outcomes through the use of feelings. Each chapter ends with a short coda on the implementation of critical feeling for the domain covered in the respective chapter.

1 CRITICAL THINKING

It is a narrow mind that cannot look at subjects from various points of view.

(GEORGE ELIOT 1994/1871, P. 54)

Reasoning as a basis for judgment and decision making is a keystone of modern Western culture. Modern society aims to educate an intellectually mature citizenry that overcomes fallacies, biases, superstition, and adherence to unquestioned authority. One offshoot of this emphasis on reasoning is the critical thinking movement that emerged in the 1960s in the philosophy of education. This movement responded to the observation that even well-educated people possessed inadequate reasoning skills (Pritchard 2014). Philosophers argued that one objective of school and college education should be the training of critical thinking. Students should be able to form beliefs or to make decisions by proper reasoning. These proficiencies can be applied to the subjects taught at school and be transferred to everyday life (see Fisher 2011). Critical thinking goes beyond the reasoning abilities examined in cognitive psychology: It relies not on descriptions of how people actually think but on prescriptions for how they should think. Such prescriptions cannot be determined by empirical research because they derive from norms and values that are beyond scientific scrutiny; they are therefore often neglected in scientific discourse (see Wecker 2013 for an interesting discussion on prescriptive statements in education).

In this chapter, the main focus will be on the prescriptive part of critical thinking because critical feeling serves similar objectives to critical thinking. It is necessary to unveil the objectives of critical thinking and why it is insufficient to serve these purposes. Together with the next chapter (on the psychology of feelings), this discussion will set the stage to introduce critical feeling. In this chapter, I first consider critical thinking as a skill and examine its strengths before looking at how critical thinking may serve values. At the end of the chapter, I discuss the neglect of feelings in critical thinking and why critical thinking is not enough.

Critical thinking as a skill

Critical thinking has been defined as "correct assessing of statements" (Ennis 1962, p. 83) and as "reasonable, reflective thinking that is focused on deciding what to believe or do" (Fisher 2011, p. 4). Critical thinking is *thinking* because it utilizes reasoning capacities and abilities to decide what to believe and what to do. These reasoning capacities and abilities consist of accurate procedures (in the sense of methods, techniques, and application of rules) to scrutinize beliefs and optimize judgments and decisions. Critical thinking is *critical* because it involves careful and judicious reflection, analyzing and questioning the thinker's own assumptions. One may wonder how critical thinking differs from intelligence. The latter is a trait of a person that is assumed to be stable over time whereas critical thinking is an activity embedded in a situation. Intelligence is something people *have* whereas critical thinking is something people *do*.

Most philosophers have defined critical thinking in a narrow sense that does not take moral considerations into account. The decisive criterion for whether or not thinking is critical is logical coherence and the correspondence of one's premises with reality (Fisher 2011). The ideal critical thinker is one who is in command of reasoning skills that enable him/her to apply the laws of logic, to observe and assess facts and events in the environment, and to connect those facts and events with prior knowledge. Critical thinkers ideally exhibit certain proficiencies, such as grasping the meaning of a statement, finding contradictions, classifying observations, making inferences and judging their quality, conceiving and stating assumptions and alternatives, offering a well-organized or well-formulated line of reasoning, evaluating statements and chains of reasoning, and detecting problems and open questions (Ennis 1987; Noddings 2012). This kind of critical thinking could be in the service of both cognitive and strategic rationality. Robert De Sousa (1987) introduced this distinction to denote the difference between rationality as fitting mental representations to facts in the world and rationality as maximization of expected utility. *Cognitive* rationality aims at *truth*; *strategic* rationality aims at *utility*.

Critical thinking in terms of cognitive rationality uses the proficiencies proposed by Ennis to create an adequate representation of the state of the world in the mind of the observer. Truth of a claim essentially boils down to two criteria (Fisher 2011; Moore and Parker 2012). First, consistency: Is the set of propositions on which an argument is based consistent? If there is any contradiction in the set of propositions, the argument as a whole cannot be true. Consistency or coherence of propositions is therefore a derivative criterion for the justification of the truth

of a statement as being true (Goldman 1986). Second, correspondence to reality: Does a set of beliefs correspond to facts in the outside world? If it corresponds only weakly with external facts, it is doubtful whether the argument as a whole is true, and we should not decide based on these beliefs.

Critical thinking in terms of strategic rationality aims to optimize decisions by trying to maximize personal utility. Although expected utility is often expressed in terms of monetary value, it could refer to any outcomes, goods, or inner states valued by a person.

Going beyond the mere use of appropriate reasoning skills, Paul and Elder (2002) distinguished critical thinking in the "weak" sense from critical thinking in the "strong" sense. The former is the use of proper reasoning *without* being able to take the perspective of the other side so that discussants are not able to challenge their own opinions. Critical thinking in the strong sense means that discussants can challenge their own opinions and reflect their own arguments. Similarly, some proponents of critical thinking have proposed neutrality of viewpoint in presenting arguments (Vandenberg 1983).

The strengths of critical thinking

Critical thinking has several advantages. By invoking rules of logic and evidence, critical thinking helps to achieve both cognitive and strategic rationality. Rules of critical thinking provide standards for best practice for exchanging arguments, where logic and evidence win against blunt attempts at attacking the person, appealing to fear, or building up a straw man to attack. People are forced to argue and act reflectively instead of impulsively (for the difference between reflective and impulsive modes of thought, see Strack and Deutsch 2004). Critical thinkers are supposedly able to arrive at better judgments and make better decisions because their thinking is less likely to be biased by sources that disrupt reasoning, such as passions, unfounded beliefs, or unquestioned authority. One might question whether even the best thinkers have always been independent of any authority. Yet one could imagine that such thinkers emancipate themselves from the educators they have listened to and that they develop the ability to distinguish accurate teachings from the inaccurate teachings they received during their youth.

Another reason why critical thinking is undisputed lies in the fact that coherent thinking – thinking logically – is a necessary condition for getting an argument right. Even if one accepts emotions, motives, and feelings as part of a good argument, one can hardly accept blatant contradictions (but see Nisbett 2003 for dialectical modes of thinking in