

ORIGINAL ARTICLE

The wrongs, harms, and ineffectiveness of torture: A moral evaluation from empirical neuroscience

Nayef Al-Rodhan^{1,2,3,4} 

¹St. Antony's College, University of Oxford, Oxford, UK

²Geneva Centre for Security Policy (GCSP), Geneva, Switzerland

³Institute of Philosophy, School of Advanced Studies, University of London, London, UK

⁴Council on Frontier Risks, World Economic Forum (WEF), Cologny, Switzerland

Correspondence

Nayef Al-Rodhan, Geopolitics and Global Futures, Geneva Centre for Security Policy, Maison de la Paix, Chemin Eugene-Rigot 2D, P.O. Box 1295, 1211 Geneva 1, Switzerland.

Email: nayef.al-rodhan@sustainablehistory.com

KEYWORDS: agency, dehumanization, dignity, empathy, neuroscience, torture

1 | INTRODUCTION

Torture is banned by numerous international and regional treaties.¹ The United Nations' *Convention against Torture* (United Nations, 1984) defines torture as "any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining [...] information or a confession, punishing him [...], or intimidating or coercing him [...], when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity" (ibid.: Article 1). Nonetheless, torture continues to flourish across the globe.² Following 9/11 and the subsequent War on Terror, philosophers and policy makers of Western states seriously debated whether there are exceptional circumstances in which torture is morally permissible or even required.

The most prominent arguments in favor of the permissibility of torture rest on an appeal to some form of utilitarianism combined with the belief that interrogational torture works.³ In contrast, those arguing for the wrongness of torture typically appeal to the notion of human dignity. In this paper, I make the case that empirical insights from neuroscience and beyond are relevant to this debate as they inform both utilitarian and deontological arguments on torture. Drawing on empirical data, I first show that torture is demonstrably ineffective and there are

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2022 The Author. *Journal of Social Philosophy* published by Wiley Periodicals LLC.

alternative methods better suited to obtain information. Then I argue that the profound neurological damages caused by torture indeed amount to a disregard for autonomy. Moreover, I explore what psychological and neurological mechanisms underlying the practice of torture. I conclude by canvassing reasons for thinking that torture is likely to persist and argue that this sheds light on human nature and on the nature of states.

2 | THE TORTURE APOLOGIST'S MISCONCEPTION

Although there is a shared intuition that torture is cruel and thus *prima facie* morally problematic,⁴ its permissibility under exceptional circumstances has received support both in philosophy and in policy circles. Philosophers and policymakers who defend the use of torture often appeal to some variation of the *Ticking Bomb Scenario*.⁵ Although this thought experiment can be traced to Jeremy Bentham,⁶ we may use Henry Shue's (1978) description of the scenario:

Suppose a fanatic, perfectly willing to die rather than to collaborate in the thwarting of his own scheme, has set a hidden nuclear device to explode in the heart of Paris. There is no time to evacuate the innocent people [...]—the only hope of preventing tragedy is to torture the perpetrator, find the device, and deactivate it. (141)

From a utilitarian perspective, the case is clear: if torturing *one* guilty person allows for saving the lives of *countless* innocent people, we are morally required to torture. Unlike deontologists, utilitarians do not accept the possibility of a categorical prohibition of harming an individual for the greater good. For the utilitarian, any act can be morally justified, “so long as the utilitarian calculus comes out right” (Allhoff, 2014: 250).

2.1 | The ticking bomb scenario in the real world

Despite the enormous popularity of the Ticking Bomb Scenario in philosophy, politics, and pop culture, it has several shortcomings. Seen from a realistic perspective, the objection goes, the scenario is delusive in at least two ways.

First, the level of certainty in the Ticking Bomb Scenario is unlikely to obtain in the real world. Although certainty is one of the criteria to be considered in the utilitarian calculus introduced by Bentham (1789/2014: 38–41), the thought experiment idealizes any doubts away. In particular, it assumes that the authorities have detained the right person with the correct information and who will be willing to cooperate within the narrow time frame. As Jamie Mayerfeld (2008) notes, “in the long history of counter-terrorist campaigns [...] there has not been one verified incident that even comes close to the ticking bomb torture scenario” (111). Since the thought experiment's assumptions are “questionable from an empirical point of view,” Bufacchi and Arrigo (2006) consider them “illegitimate” (360–61). Given the potentially grave consequences of torture and past experiences of having mistakenly tortured innocent people,⁷ this epistemological limitation needs to be taken seriously.

Second, the Ticking Bomb Scenario presents torture as an isolated act. However, as David Luban (2005) points out, when officials take the decision to torture, there is an institutional

context to consider: “In the real world of interrogations, decisions are not made one-off. The real world is a world of policies, guidelines, and directives” (1445). One reason why we cannot realistically imagine torture without institutionalization is that effective interrogation requires proficiency. As Shue aptly notes, an official who has never tortured anyone before and suddenly ends up in a Ticking Bomb Scenario “would probably also be an incompetent torturer, most unlikely to succeed at what might well be his first try at extracting information. [...] Torture needs a bureaucracy, with apprentices and experts, of the kind that torture in fact always has.” (Shue, 2006: 231). Moreover, there is reason to doubt that officials would show restraint once institutional structures are in place. Shue compares the one-off hypothetical to an “imaginary alcoholic who drinks two beers only at night. [...] To think that there may be rare alcoholics who drink moderately is to fail to understand alcoholism. Similarly, history does not present us with a government that used torture selectively and judiciously.” (ibid.: 234) This assessment is supported by Darius Rejali’s (2007) analysis of the history of attempts to regulate torture (526–29). Rejali identifies several slippery slopes which render effective regulation difficult: over time, the scope of who can be subjected to torture tends to increase, the range of approved torture techniques broadens, and the oversight mechanisms are weakened as professionalized torturers create their own organizations (ibid.: 530–32). Therefore, Rejali holds “that *regulating* torture for information is a fool’s dream” (ibid.: 532, original emphasis).

The lack of certainty and the danger of developing a harmful practice demonstrate that when torture is viewed realistically, the initial consequentialist verdict on the permissibility of torture is undermined. The utilitarian will, of course, simply respond that their argument nevertheless holds up in those exceptional cases where we *do* have certainty and where steps are taken to prevent institutionalization. Let us ask, then, whether in such cases we are indeed morally permitted to torture.

2.2 | The futility of interrogational torture

A key assumption of the Ticking Bomb Scenario is that we can reasonably expect interrogational torture to lead to the revelation of accurate information. In this section, I argue that recent psychological and neuroscientific findings demonstrate that this assumption is false for at least three reasons.

First, when making assumptions on the efficacy of torture, there is a tendency to overestimate the power of pain as a means of revealing the truth and underestimate other psychological factors that help the tortured person not to “break”, like attribution of meaning and dissociative processes (Janoff-Bulman, 2007: 432–33). Suffering becomes more tolerable when the person in pain sees a meaning in it, as it is the case with someone devoted to a higher cause; and dissociative processes provide a form of psychological protection by generating the feeling of being detached from consciousness in situations that are otherwise too difficult to bear.

Second, the simple act of speaking functions as a “conditioned safety signal,” irrespective of the truth of what is said (O’Mara, 2015: 103–04). Being actively tortured typically makes it impossible for the captive to convey information, either because the torture method physically prevents the captive from speaking (in the case of waterboarding, for instance) or as a result of intense pain. Given that the aim is to elicit information, the torturer is likely to pause whenever the captive signals a willingness to talk. The captive’s act of speaking, therefore, functions as a conditioned safety signal in that it is an act that brings about a period during which they will

not experience harm, regardless of whether the statements are true. The captive will simply say whatever they think the torturer wishes to hear.

Third, the neurobehavioral consequences of torture render the information produced-unreliably. As Shane O'Mara argues in *Why Torture Does not Work* (2015), there is ample evidence that the extreme stress caused by torture leads to structural neurological changes, in particular in the regions responsible for regulating anxiety, memory, fear, and emotional responses, such as the amygdala, hippocampus, and cortex. As a result, being tortured impairs the victim's ability to remember the very information being sought (ibid.:105–203).⁸

Beyond the acute effects of stress, the negative impacts aggravate when a person is tortured over a longer time-period. The prolonged release of stress hormones, in particular cortisol, severely impacts general cognitive functioning and processing by damaging the hippocampus, a brain structure with a key role in encoding and retrieving episodic memories (ibid.: 116), and bringing about changes to the prefrontal cortex, which has a critical function in decision-making and executive control processes (Harris, 2015: 35–36).

Psychological forms of torture are just as harmful and just as unlikely to lead to accurate confessions as physical torture.⁹ Sleep deprivation, for example, results in decreases across multiple cognitive functions. Extended periods of sleep deprivation cause changes in the parts of the brain's architecture responsible for learning, memory, and executive function. Moreover, it leads to a loss of tissue volume in the hippocampus and a reduction in the functioning of the frontal and temporal lobes. Such methods are likely to actively frustrate the torturer's aims, leading to hallucinations and facilitating a long-term structural remodeling of brain systems that they want to access (O'Mara, 2015: 167).

The psychological and neuroscientific evidence canvassed here suggests that even putting aside epistemic concerns, committing acts of torture is highly unlikely to assist in the saving of lives.

2.3 | Philosophical relevance of empirical data

Other than casting doubt on the evidence discussed above, the defender of the permissibility of torture has one obvious reply: to argue that empirical findings are irrelevant to the philosophical question at hand. Fritz Allhoff (2014), for instance, rejects any objections like those just presented. He claims that invoking empirical considerations misses the point that the Ticking Bomb Scenario is a *hypothetical* case, about which we make moral evaluations that then feed into our theorizing. According to Allhoff, empirical objections “change the question from being about ticking time-bomb cases to being *about the world*” (ibid.: 252, emphasis added).

In as much as this objection carries weight, it is in virtue of drawing attention to the fact that thought experiments can serve different purposes. Ethics, broadly construed, attempts to answer the question “What ought I to do?”. Normative ethics reflects on the moral principles or morally relevant factors that underlie our reasoning to develop moral theories that guide our decisions. In this domain, it makes sense to work with abstract scenarios that can easily be modified to examine the influence of individual factors on our moral judgments. Applied ethics, in contrast, applies these moral principles to practical questions to provide guidance for real-life decisions.

Whenever philosophical deliberations go beyond the development of theories and begin applying them to genuine decisions, empirical findings become relevant. Apart from being

convinced that an act would be permissible *if* some circumstances are obtained, we must also be convinced that the circumstances *do* obtain. Mayerfeld (2008) levels a similar criticism when he observes that philosophers create thought experiments “that clear away the messiness of the real world” (ibid.: 113). The problem, Mayerfeld argues, is that philosophers fail to reintroduce these messy details when they attempt to apply these principles to real situations: “The problem is that real-life complexities often are not brought back into consideration. People confuse the abstract examples with the real world. Hence the catastrophic fall-out from discussion of the ticking bomb torture scenario” (ibid.).

In other words, assuming the accuracy of the scientific evidence suggesting that interrogational torture does not work, the consequentialist argument for the permissibility of torture rests on a false premise; applied philosophy and policy discussions that appeal to an idealized version of the Ticking Bomb Scenario are misguided.

2.4 | Promising alternatives

Returning to the Ticking Bomb Scenario one last time, let us assume we knew that we could deactivate a bomb, and thereby save many lives if we just could convince a detainee to provide the relevant information. If we also take ourselves to know that torture is no viable route to eliciting this information, what ought we to do?

Research in recent years suggests that non-coercive forms of interrogation can be more effective in encouraging interviewees to disclose intelligence than coercive techniques. For instance, professional military and intelligence interrogators testified in interviews that in their experience, an interrogator’s excellent interpersonal skills and the use of rapport and relationship-building techniques are among the most decisive factors for successful interrogations (Russano et al., 2014). Another study found that non-coercive strategies, especially rapport-building techniques, increase the likelihood of captives to disclose meaningful information, to do so earlier in the interview, and to give more complete responses (Goodman-Delahunty et al., 2014). One reason why non-coercive interrogation techniques might be more successful than coercive techniques with seemingly uncooperative individuals is that they take the psychological factors mentioned above into account. By refraining from building up extreme pressure, the captive is not pushed toward psychological dissociation, and recognizing the mental strength that comes with strong convictions gives the interviewers an angle on how to maybe get through to the captive.¹⁰ Although more research is required, especially as it regards the use of such techniques in the case of terrorists (O’Mara, 2015: 245), there is potential for a more ethical and effective approach to extracting information.

In conclusion, the utilitarian judgment that torture is morally permissible or required under certain circumstances relies on real-world complexities being idealized away. Aside from omitting uncertainties and unintended negative consequences, the Ticking Bomb Scenario, as standardly presented, depends on the claim that torture is a reliable route to accurate information. I have canvassed evidence for thinking that this claim is false, and consequently argued that utilitarian arguments in the context of applied philosophy and policy making in favor of torture’s permissibility are misguided. However, this does not imply that it is morally prohibited to attempt to obtain information from a potential terrorist. Instead, these findings call for exploring alternative, more effective, and less harmful methods of interrogation—and there are reasons to believe that such alternatives are available.

In the next section, I will move on from utilitarian to deontological approaches and consider in what ways empirical studies support the idea that torture's violation of human dignity makes it categorically and distinctly wrong.

3 | TORTURE AND DIGNITY

In contrast to those who argue that torture is sometimes permissible on consequentialist grounds, those who make the case that such methods are categorically forbidden typically take a deontological approach. For the deontologist, torture is wrong in principle, regardless of its consequences. In international law, the right not to be tortured is grounded in human dignity. As the United Nations' *Universal Declaration of Human Rights* (United Nations, 1948) states, "all human beings are born free and equal in dignity and rights" (Article 1). The Declaration proclaims that human dignity is "inherent" to "all members of the human family" and that the rights that derive from it are "inalienable" (ibid.: Preamble). Although no account of the grounds of human dignity is provided, borrowing a term from John Rawls, we can say there is an international overlapping consensus on the value of dignity as described in the Declaration.

3.1 | Categorical wrongness

The most influential philosophical explication of dignity is to be found in Immanuel Kant's humanity formulation of the Categorical Imperative. This formulation demands that we should never treat humanity, whether in ourselves or in others, merely as a means to an end but always as an end in itself (Kant, 1785/1997: 4:429).¹¹ Most Kantian scholars agree that torture presents a paradigm example of the violation of human dignity (see, e.g., Scheppele, 2005: 287; Juratowitch, 2008: 81). In standard cases of torture, the victim is treated as a mere means to achieve the torturer's ends, such as obtaining information, without taking the victim's status as a moral agent into consideration. From the Kantian perspective, then, carrying out such acts violates the Categorical Imperative and therefore constitutes an absolute moral wrong.¹²

3.2 | Distinct wrongness

Although it is true that torture is morally wrong because it can result in particularly long-lasting harms (to use utilitarian terms) and is a particularly dramatic case of using someone as a mere means for one's own ends (to use Kantian terms), David Sussman (2005) takes both utilitarian and paradigmatic Kantian objections against it as insufficient. According to Sussman, these approaches fail to capture what makes torture uniquely insidious: the fact that it forces the victim to become complicit in the torture (ibid.: 2; 4). Pain has an immediate and imperative nature that calls upon the person experiencing it to respond and act in such a way that alleviates their suffering. Although the assumption that the victim will respond to this call by disclosing the truth is mistaken, the victim is unable to remain untouched by the pain and does not respond at all. In other words, by inflicting pain on their victim, the torturer uses the body of their victim as a surrogate which repeats their demand as if it is coming from an inner voice, thereby turning the victim's agency against itself (ibid.: 24–26). This forced self-betrayal is a perversion of the victim's autonomy and constitutes an unparalleled disregard for human dignity (ibid.: 30).

Reports from and about torture victims support the deontological perspective by documenting how profoundly this experience affects their personality and their ability to live a dignified, self-governed life. In addition to the above-mentioned negative influences on central cognitive functions—from impaired decision-making and executive control processes to possible memory loss and hallucinations—survivors suffer emotional problems, ranging from irritability and anger to depression and thoughts of suicide, and have difficulties maintaining relationships and employment, thus struggling with living a normal life (Physicians for Human Rights, 2005: 9). As Holocaust survivor Jean Améry, who was captured by the SS and systematically tortured for his part in the resistance against the Nazi occupation, testified: “Whoever was tortured stays tortured. Torture is ineradicably burned into him [...]” (Améry, 1980: 34). More than 30 years after he survived imprisonment in Auschwitz and other concentration camps, Améry committed suicide.

3.3 | In the gray zone: Coercion without torture

So far, I have mostly contrasted torture with non-coercive interrogation methods and argued that there is empirical evidence that the latter is more efficient. However, between these two extremes, there is a wide range of coercive interrogation techniques that fall short of qualifying as torture. Assuming that the superiority of non-coercive methods is correct, the question of the morality of such techniques has not arisen in the consequentialist debate, since non-coercive techniques cause comparatively less harm and are therefore preferable. From a Kantian perspective, however, we can ask how coercive but non-torturous measures are to be judged in relation to dignity. The testimonial of “Matthew Alexander” (a pseudonym), the head of an interrogation team involved in the search of an Al Qaeda leader, offers an example for such practices in the real-world. In the book *How to Break a Terrorist* (Alexander, 2008), he presents himself as different from the other interrogators because he refrained from physically assaulting captives. Nevertheless, the methods of psychological manipulation he employed can be described as coercive. Shue criticizes Alexander’s approach as a failure of respecting the captives’ humanity: “He pretends, and tricks, and lies to his prisoners, treating them in ways that in almost any other circumstances would be clearly immoral [...]. They are not treated as ends: they are used instrumentally to obtain information.” (Shue, 2015: 124–25). If we conceive of the level of dignity violation through psychological manipulation as a continuum, with simple trickery at the lower and mental torture at the higher end, then different interrogation methods can be condemned to varying degrees. Nevertheless, dignified treatment in which the captive is treated with respect remains preferable to a dignity-violating measure that tries to force the captive to do something through deception or the exercise of power.

In conclusion, psychological and neuroscientific studies underpin arguments drawn from Kant and Sussman that torture can be conceived as an act that seriously disregards the victim’s autonomy. Consequently, dignity-based political systems are justified to consider torture categorically and distinctively wrong. Moreover, although coercive methods are not equal to torture, their violation of human dignity is still morally reprehensible. Therefore, even under extraordinary circumstances, it is morally imperative to respect the dignity of a perceived enemy and treat them with humanity.

4 | THE NEUROSCIENCE OF “TORTURE CULTURE”

Most debates concerning the moral (im)permissibility of torture focus on the victim, overlooking the impact on the torturer. This analytical gap is worth filling. As it is the torturer who

commits the morally contentious act, studying the underlying mechanisms and motivations helps us better understand and evaluate the act of torture. In a broader context, neuroscience and psychology can also inform our understanding of what the practice of torture means for our conception of human nature, and how its use can lead to what we might call a “torture culture”. In order to capture the transformative effects of torture on the perpetrator, we must first understand how someone can become capable of committing such an act. What does it take for a person to disregard someone’s dignity and infringe the central value upon which our political life is based?

4.1 | Empathy and mechanisms of moral disengagement

Imagining what it would take to torture someone is difficult, given that we usually conceive of ourselves as empathic beings. Empathy is fundamental to the human experience, and interdisciplinary approaches, drawing on behavioral studies and neuroscience, have demonstrated the deep significance of this prosocial ability (see, e.g., Zaki & Ochsner, 2012: 675).¹³ Brain imaging techniques have revealed that when we perceive pain in others, the neural circuit involved in the affective empathic response is the same as in the experience of our own physical pain (Decety, 2010: 263). Although there always remains an “empathy gap” between the person in pain and the empathetic observer—after all, the latter does not directly experience the sensory and motor components to which the former is exposed (O’Mara, 2015: 226–27)—there is a real way in which we feel the suffering of a person in pain, visible in our neuronal activity. This mechanism of reflecting others’ feelings is theorized to be based on mirror neurons, a type of braincells which respond in the same way to observing an action performed by someone else as when the person does the action themselves (see, e.g., MacGillivray, 2009). So how can the practice of torture be reconciled with the fact that we are born to empathize with the suffering of our fellow humans?

The capability of inflicting extreme anguish on others implies that the neurological mechanisms responsible for empathy can become disengaged. Developmental neuroscience studies offer clues as to how, through a combination of the maturation of certain brain regions and interpersonal experiences, humans become better equipped to decode complex emotions, and thus become empathetic in increasingly sophisticated ways. At the same time, humans develop their ability to regulate their emotions and respond to a given situation in a “socially tolerable and sufficiently flexible” way (Decety, 2010: 262). This skill is linked to the development of metacognition and the maturation of the brain regions that underlie working memory and inhibitory control (Tamm et al., 2002), including greater inhibitory control of responses to others in pain (Decety, 2010: 262–63), thereby making it possible to suppress the affective response to the suffering of others—even to the point of torturing someone.

The psychological mechanisms that go hand in hand with the neurological disengagement and allow people to rationalize the selective inhibition of affective empathic responses have famously been studied by Albert Bandura. In *Moral Disengagement: How People Do Harm and Live with Themselves* (Bandura, 2016), he attempts to explain how “ordinary” people can commit moral wrongs without conceiving themselves as a bad person. Bandura argues that while people may have clear moral standards, their capacity to self-regulate their behavior is not always activated (ibid.: 2). As moral disengagement is selective, people can “be ruthless and humane simultaneously toward different individuals, depending on whom they include and exclude from their category of humanity” (ibid.). Although ordinary people may not be able to

fully inhibit empathic responses at will, they can modulate their self-sanctioning mechanisms to act in ways inconsistent with their own moral standards (ibid.: 45–46).

Bandura presents an array of mechanisms involved in moral disengagement (ibid.: 48–103) applicable to torture.¹⁴ Policymakers who invoke thought experiments like the Ticking Bomb Scenario to argue in favor of torture in emergency situations provide *moral justifications*, appealing to the lives saved as a means of construing their cruel behavior as moral necessity. This claim is reinforced by means of what Bandura calls an *advantageous comparison*: the decision to torture is contrasted with the tragic fallout of a terrorist attack, thus construing torture as a morally righteous decision. *Euphemistic language*, such as calling torture “enhanced interrogation,” helps to conceal the act’s brutality. Moreover, moral disengagement is facilitated when a situation allows for the *disregarding, distorting, or denying of harmful effects*, which is easier for someone ordering torture than it is for the employee carrying out the order. To carry out their task, the torturer must revise their perception of both the victim (through *dehumanization* and *attribution of blame*) and their own role (through *displacement* and *diffusion of responsibility*).

Psychological mechanisms enabling torture are also reflected on the collective scale. In *Unspeakable Acts, Ordinary People: The Dynamics of Torture* (Conroy, 2000), John Conroy analyzed the nine stages of how democracies respond when they need to acknowledge that they committed torture (244–47). The first reaction of governments typically consists in a blatant denial. When they have to admit to it, they tend to minimize the abuse. This is followed by attempts to disparage the victims and to justify the actions by pointing to an existing necessity. Another method of diverting attention to avoid responsibility consists in blaming others—be it those who defend the victim, claiming they support enemies of the state, or those speaking about it, stressing that what is in the past is best to be forgotten. The act is relativized by proclaiming that torture was only conducted by a few bad apples, and pointing toward others who had done worse. Finally, officials reassure themselves by thinking that the victims have certainly gotten over it. All these strategies aimed at evading responsibility ultimately lead to torturers rarely being punished adequately for their crimes.

To conclude, neurological and psychological disengagement mechanisms explain how people can be overall empathetic and adhere to their moral standards but selectively inhibit their emotional reactions and mistreat others. However, neither the harsh disregard that the torturer has for their victim nor their excessive leniency regarding their own actions evolves in a vacuum. Rather, they are the product of socio-political factors and are embedded in political institutions. In the following section, I will thus move on to the issue of political dehumanization and address in what way this impacts the torturer.

4.2 | Us versus them: Failing to see the humanity in others

Disregarding a person’s dignity is easier if they are not viewed as fully human. The notion of dehumanization has been central to the study of the most unconscionable atrocities of the twentieth century. In recent decades, insights from neuroscience have shed new light on dehumanization’s neurological basis.

Contemporary neuroscience conceives of dehumanized perception as a form of “cognitive bias characterized by a spontaneous failure to think about [...] thoughts and feelings in a social target’s mind” (Harris & Fiske, 2011: 175). Empirical evidence shows that “dehumanization is linked to a neural constraint on cognition,” making it “difficult to be both empathetic and

analytic at the same time” (Jack et al., 2013: 326). As horrendous as the consequences are for the victims, dehumanization is crucial for the torturer's mental well-being. When the torturer's social cognition neural networks remain engaged, they are unable to gain sufficient distance from the victim. There is evidence that this can lead to the development of post-traumatic stress disorder (PTSD) (Meyer-Parlapanis & Elbert, 2015: 439).¹⁵ Denying the victim's humanity is thus a technique of self-preservation. Therefore, the act of torture harms not just the victim but also the torturer by either posing the risk of causing a psychiatric disorder or pushing the torturer to develop the ability for selective cruelty. The latter option presents a form of harm to the torturer as it forces the person to change in a way that goes against his empathic nature.

Some environments are more conducive to dehumanization and violence than others. The horrors of Abu Ghraib, for instance, were caused “not just [by] extraordinary individual evil” but also by familiar processes related to the social context (Fiske et al., 2004: 1482). The soldiers were highly stressed and understood themselves to be constantly in danger, seeing fellow soldiers dying on a daily basis and their return home a year overdue (Taguba, 2004: DODD0A-000248-308).¹⁶ The propensity to experience spontaneous prejudice against members of the outgroup is gravely exacerbated in such climates. The willingness of soldiers to carry out horrific acts will also partially be explained by the fact that they belonged to an institution premised on strict hierarchies, conformity with one's peers, and obedience to authority. These values are especially important in combat, where “conformity to one's unit means survival, and ostracism is death,” so people in such contexts rely on their immediate social group when trying to make sense of complex, difficult, or ambiguous situations (Fiske et al., 2004: 1482). In the next section, I will focus on situations with complex relations of power in more detail and address the relevance of coercion to an individual's sense of moral responsibility.

4.3 | Moral responsibility in a coercive environment

As noted at the beginning of the discussion, torture is commonly regarded as morally problematic, even by those who defend its use in exceptional circumstances. For many, this judgment is made in tandem with the claim that those who torture are morally guilty. However, the attribution of moral responsibility for an act of torture is not straightforward. Neuroscientific findings help us to assess the question of moral responsibility by connecting it to insights regarding the transformative power of coercion on a person's sense of agency: that is, the subjective experience of a person when they identify themselves as the “author” of a particular action. Given that agency is a necessary,¹⁷ if not sufficient condition of moral responsibility (we typically only hold those accountable who can understand and are free to choose what they are doing), empirical insights are relevant to this debate, and ultimately matter for accountability.

In neuroscience, (the sense of) agency¹⁸ is often explored in relation to (a sense of) body-ownership (Tsakiris et al., 2007). The sense of body-ownership is a pre-reflective experience that “I am the subject of the movement, the moving body is mine,” whereas the sense of agency is the phenomenologically thicker pre-reflective experience that “I am the cause or author of the movement, I am in control of my action” (ibid.: 646).¹⁹

The influence of coercion on the sense of agency and the sense of personal responsibility has been widely studied for over half a century. Following the view put forward by Denis G. Arnold (2001), a setting with a person P putting pressure on another person Q qualifies as coercive if it fulfills certain situational conditions like Q experiencing psychological duress and not being able to resist.²⁰ Stanley Milgram's (1963) famous obedience study succeeded in

creating such a coercive setting, resulting in a majority of participants complying with an authoritative figure's instruction to administer grave electric shocks to another person.²¹ In a more recent study (Caspar et al., 2016) that used a similar design and built on the premise that the perceived time between a voluntary action and its outcome is a reliable indicator of agency, experimenters asked participants to estimate the temporal interval between the action of pressing a key and its outcome of administering physical harm, accompanied by an auditory signal. The temporal interval between an action and its outcome is known to be perceived as shorter when an action is performed intentionally than when it is performed unintentionally. This conversely implies that if coercion does indeed reduce the sense of agency, then the resulting interval estimates will be longer in coercive contexts. The results of the experiment supported this hypothesis, showing that “coercion increased the perceived interval between action and outcome, relative to a situation where participants freely chose to inflict the same harms” (ibid.: 585). The difference in the agents' neural processing suggests that “people who obey orders may subjectively experience their actions as closer to passive movements than fully voluntary actions” (ibid.). In other words, the experience of people who act under coercion resembles more a sense of body-ownership than a sense of agency.

Given that we understand agency here as the performance of an intentional action, the fact that the participants do not perceive themselves to have intended these actions suggests that coercion in fact influences people's *actual* agency. Unlike psychological mechanisms rooted within the person that can be interpreted as an expression of their (subconscious) will—for instance, when self-deception leads a person to misjudge their own intentions, their action is still an instance of them exercising their agency—coercion is an external factor that holds sway over a person. This influence manifests in such a way that the individual measurably acts as if they were not completely in control. Therefore, such studies provide good reasons to think that when people who are committing cruel acts in coercive environments claim that they did not feel in control of their actions, these claims are not mere rationalizations and excuses. This is not to say that individuals under coercion no longer have any control at all over their actions and thus cease to be agents. However, this might warrant taking the idea of some sort of diminished agency seriously, to reconsider to what extent we hold people morally responsible for actions committed under coercion, and to ask whether part of the responsibility should not be shifted from the person executing the harmful order to those who created the coercive environment and instructed the administration of harm.

In conclusion, people who are capable of empathy and of living according to their own moral standards are nevertheless capable of cruelly mistreating their fellow human beings, even without perceiving themselves as morally bad. This is a result of neurological and psychological disengagement mechanisms. The systematic disregard for human dignity achieved through dehumanization, and a coercive environment that impairs their sense of agency, transform the torturer's perception of their victims and themselves, which in turn may also diminish the extent to which torturers should be held morally responsible for their actions. As I will discuss in the next section, a normalization of torture has the potential to manifest as a torture culture.

5 | WHY TORTURE IS HERE TO STAY

As I have argued here, interrogational torture does not work, and severely harms both the victim and perpetrator, and we are in the process of developing ethical alternatives. Given this, it is reasonable to ask why torture continues to be used.

The answer to this puzzle is complex. For one thing, governments face institutional challenges that prevent them from learning. As Rejali elaborates, the informality of how torture is taught, the lack of professional torturers, the rivalry among interrogators, and the decentralized structure of counter-insurgency warfare which has typically engaged in torture in the past, are all reasons why knowledge about torture can hardly be accumulated (Rejali, 2007: 520–21). Moreover, the data that has been recorded is rarely made available to the public and therefore cannot be analyzed (ibid.: 521–23).

Furthermore, neither human beings nor states necessarily act rationally. This fact is captured by Nayef Al-Rodhan's theory of *Emotional Amoral Egoism* (Al-Rodhan, 2021), a recently defended theory of human nature grounded in neuroscientific and psychological research.²² A central element of this account is the emphasis on the role that emotionality plays in decision-making and cognition (ibid.: 63–64).²³ Although theories on human nature primarily relate to individual actors, they may also shed light on the behavior of states, whose institutions are staffed and shaped by individual people. Consequently, human characteristics like emotionality are reflected, to a greater or lesser extent, on a national level.²⁴ The Global War on Terror is evidence of this. In addition to constituting a physical attack, 9/11 was also a metaphysical attack on the *idea* of America and the West (Al-Rodhan, 2015). This assault left these states and their citizens vulnerable and emotional, and officials found themselves in a state of urgency, driven by a sense of responsibility to defend the national interest. This combination of emotionality and a desire for action led to an excessive backlash, which resulted in the torture of suspected terrorists. Recognizing the influence of human nature on governance helps us see that one of the reasons why states use torture lies in the fact that they do not act rationally, but emotionally.

Another potential explanation for the continuing use of torture is that the authorities authorizing such acts fail to be truthful regarding their intentions. Luban (2005) identifies five aims of torture (1429–36). The only aim that could plausibly be accepted in dignity-based political systems is intelligence gathering from uncooperative captives, as in the Ticking Bomb Scenario, because this kind of torture is not obviously motivated by cruelty. The other four reasons Luban describes are: prolonging the pleasure that comes from victory over others, terrorizing people to force submission, punishment, or to extract confessions (ibid.: 1432–35). Given that people are likely to judge torture for any of these more obviously cruel reasons as impermissible, authority figures motivated by other motives than obtaining relevant information have good reason to conceal their true intentions and falsely claim that torture is ordered for the greater good.

Finally, it must be kept in mind that those who are in a position to order torture do not typically carry it out themselves. As we have seen, the torturers who suffer the psychological and neurological consequences of their actions often act under coercive circumstances at the very bottom of a hierarchy chain. The decision-makers are people in power like lawyers, politicians, or even presidents. Empirical studies suggest that being powerful fosters certain characteristics that could contribute to a decision to torture. People who feel powerful are less likely to consider other people's perspectives (Galinsky et al., 2006: experiments 1, 2A, and 2B), have problems deciphering other's emotions (ibid.: experiment 3), and feel less distress and less compassion when they hear about other's suffering (Van Kleef et al., 2008). On a neurological level, the lack of perspective-taking and empathy could be partly explained by the observation that people who feel powerful show reduced mirroring (Hogeveen et al., 2014). Studies show that the more power a person experiences, the less the mirror neurons are firing, even if the powerful individual makes a conscious effort to produce a mirror response (Naish & Obhi, 2015).

Any approach that seeks to eradicate torture must take institutional structures, the nature of humans and states, possible ulterior motives, and the distorting effects of power on the judgment of decision-makers into account. The still ongoing reappraisal of the War on Terror shows that a dignity-centered public discourse can bring about positive change. When the United States Senate Select Committee on Intelligence (2014) published its report on the CIA's detention and interrogation program, it paved the way toward an evidence-based policy discussion. The report clearly stated to have found that "enhanced interrogation techniques" failed to produce any relevant intelligence or to convince the detainees to cooperate (ibid.: xi). To continue their program, the CIA misrepresented the effectiveness of their actions, downplayed the brutality of it, and tried to prevent any scrutiny and oversight from other institutions (ibid.: xi-xviii). The pictures of Abu Ghraib and the uncovering of the CIA's unjustifiable actions influenced the opinion of the public and public officials. When former President Donald Trump during his election campaign in 2016 announced that he wanted to bring these interrogation techniques back—including waterboarding, which was banned in 2009—the director of the CIA publicly opposed him, stating he would resist such an order (Engel & Windrem, 2016). Yet this resistance is not guaranteed to last, and torture continues to be reported all over the world. The hope that continued public discourse guided by empirical evidence will change things for the better remains.

6 | CONCLUSION

This paper set out to demonstrate that insights from empirical sciences, especially from neuroscience, are relevant to the philosophical discussion of torture. Initially turning my attention to the focus of much of the philosophical literature, I argued that in appealing to the Ticking Bomb Scenario, consequentialist arguments in favor of torture's permissibility are built on the false assumption that torture leads to veridical information. Neuroscientific and psychological evidence suggests that, in many cases, this assumption is false. I then argued that it is mistaken to respond to this objection by ruling out the relevance of empirical considerations. Turning to deontological approaches to torture, I argued that the psychological consequences and their neurological manifestations support the claim that torture violates autonomy and human dignity, and thus lend credence to the argument that torture should be considered categorically and distinctly wrong. I then attempted to reconcile the systematic use of torture with our conception of ourselves as empathic beings able to live according to our moral standards. I argued that empirical evidence can be marshaled to explain how dehumanization and coercive structures gradually distort people's moral compasses and create the conditions under which a torture culture can flourish. Finally, I argued that institutional shortcomings in knowledge management, the role of emotions in decision-making, hidden motives of authorities, and the numbing effects of power give us good reason to think that torture, at least in the medium term, is likely to persist.

What lessons can we take from the preceding discussion? The first is the value of interdisciplinary studies, illustrated both by how philosophical questions inspire scientific research and scientific findings in turn inform philosophical debates. The second is that the empirically grounded insights concerning the futility of torture must be clearly communicated to intellectuals, concerned citizens, and especially policy makers. As well as leading to societies that more successfully live up to their citizens' moral standards, this may also result in fewer transcultural schisms, more effective national and global security, and a more peaceful and sustainable global order.

ORCID

Nayef Al-Rodhan  <https://orcid.org/0000-0002-7719-7038>

ENDNOTES

- ¹ For an overview of the international and regional instruments on torture and other forms of ill-treatment, see, for example, the joint publication by the Office of the United Nations High Commissioner for Human Rights, the Association for the Prevention of Torture, and the Asia Pacific Forum of National Human Rights Institutions (2010).
- ² Because torture typically takes place in secret, “a comprehensive and categorical statistical assessment of the global scale of torture is impossible” (Amnesty International, 2014: 10). Between 2009 and 2013, Amnesty International collected reports of torture and other ill-treatment committed by state officials from 141 countries around the world (ibid.).
- ³ A report by the International Committee of the Red Cross (2016) revealed major cultural differences in public opinion about the effectiveness of torture. On average, when asked whether “a captured enemy combatant [can] be tortured to obtain important military information,” more than a third of respondents agreed and almost half of them disagreed with the statement (ibid.: 10). Out of the 16 countries in which the survey was conducted, the three with the highest affirmative responses were Nigeria (70% yes, 29% no), Israel (50% yes, 25% no), and the United States (46% yes, 30% no) (ibid.). The three countries with the strongest negative responses were Yemen (0% yes, 99% no), Colombia (15% yes, 85% no), and Switzerland (18% yes, 72% no) (ibid.).
- ⁴ I take this to be self-evident. The fact that interrogational torture is sometimes judged permissible or even required does not imply that it is not cruel and thus morally problematic, as evidenced by its contentious nature.
- ⁵ For an example of someone using the Ticking Bomb Scenario to argue for policy proposals in favor of torture in exceptional circumstances, see Dershowitz’s (2004) proposal to issue torture warrants (which he believes will ultimately control and limit the use of torture) (257–80).
- ⁶ For an analysis of Bentham’s view of torture, see Justin Clemens (2017).
- ⁷ The lack of statistics notwithstanding, there are many documented cases of torturing of innocents. For instance, the report on the CIA’s detention and interrogation program in the context of the proclaimed War on Terror found that 26 out of 119 detained individuals, some of whom have been subjected to torture, were wrongly detained (United States Senate Select Committee on Intelligence, 2014: 14).
- ⁸ In his review of O’Mara’s book, Shue considers the possibility that torture may only partially compromise memory, and the torturer may be willing to accept a trade-off between an impaired ability to remember peripheral details in exchange for increased willingness to comply (Koh & Shue, 2016: 756). However, apart from the missing guarantee that torture leads to compliance, Shue warns that any information the torturer might obtain must be weighed against the potential long-term political consequences, such as a backlash in form of further radicalization of Muslims in response to the discriminatory War on Terror (ibid.).
- ⁹ For an analysis of the consequences of psychological torture, see Almerindo E. Ojeda (2008). For a handbook that addresses the treatment and rehabilitation of both psychological and physical torture survivors, see Metin Başoğlu (1992).
- ¹⁰ For a more extensive discussion of the efficiency of non-coercive interrogation techniques, see O’Mara (2015): 240–73, especially 261–65).
- ¹¹ The *humanity formulation* is one of four versions of the Categorical Imperative. The others are the *formula of the universal law of nature*, the *autonomy formula*, and the *kingdom of ends formula*. For an overview of the different versions, see Johnson and Cureton (2021).
- ¹² Peter Brian Barry (2015) argues that there are instances of torture that do not violate the humanity formulation and therefore fail to be morally absolutely prohibited by the Categorical Imperative (598–612). As part of his argument, Barry presents two cases in which torture supposedly does not satisfy the definition of inhuman treatment. First, punitive torture could be used for the victim’s benefit by making them understand the wrongness of their past actions (Barry, 2015: 602–03). Second, a torture victim could consent to endure the suffering, for instance in exchange for money (ibid.: 603–04). However, following the ‘realistic view’ endorsed above,

these examples fall short. Given the severe and long-lasting harmful effects of torture, it cannot be reasonably assumed that torture will ever be for the victim's benefit or that a fully informed rational actor would genuinely consent to such treatment. Therefore, if we reject the use of idealized thought experiments for applied philosophy, dignity-based systems must consider torture, in line with Kant and against Barry, as always inhumane and therefore categorically prohibited.

- ¹³ In his most recent book, Jamil Zaki (2019) examines the functioning of empathy in detail and presents his vision of how we can learn to utilize empathy.
- ¹⁴ Torture can involve different actors: the person who carries out the torture, the decision-maker who orders the torture, bystanders in the know, and policymakers who publicly encourage torture. The mechanisms of moral disengagement presented hereafter apply to these actors to varying degrees—but they all contribute to the explanation of people's ability to (contribute to) torture in one way or another.
- ¹⁵ For a vivid account of the psychological consequences experienced by soldiers who had engaged in torture, see Joshua E. S. Phillips (2010) and Eric Fair (2016).
- ¹⁶ Besides Taguba's report of investigations, see Steven Strasser (2004) for two other reports detailing the abuse of Iraqi prisoners by U.S. personnel in Abu Ghraib.
- ¹⁷ For an account that agrees that agency is a necessary condition of moral responsibility, see Helen Steward (2011).
- ¹⁸ Neuroscientists study the relation of the reported *experience* of mental states with the underlying neurological functions and processes. Therefore, when they study the neurological underpinnings of the philosophical concept of agency, they typically use the term "sense of agency." Sense of agency refers to the reported perception of being the author of one's action and being in control of choosing an action (Haggard, 2017: 197). Given that the neurophilosophical account of agency discussed here is grounded in empirical findings, whenever I do not explicitly address them as two separate concepts, I use the terms "sense of agency" and "agency" as interchangeable.
- ¹⁹ This identification of (a sense of) agency with being the initiator of an action and the ability to control it is not uncontested. As Shaun Gallagher notes, others identify the agency with the phenomenologically thinner notion of body-ownership, whereas he himself proposes a "multiple aspects" account of the sense of agency (Gallagher, 2007). I will follow the conception presented above that conceives of agency as a thicker concept that is in line with the standard conception of action and the standard theory of action established by G. E. M. Anscombe (1957) and Donald Davidson (1963).
- ²⁰ Arnold juxtaposes the empirical view with what he calls the moralized view. The latter conceives of a situation with a person P putting pressure on another person Q as coercive if P is unjustified in making the purported coercive demand and Q has a moral obligation to resist this demand. However, he argues for the moralized view to be rejected because it needs to assume prior moral judgment (which comes with the problem of adjudicating in cases of disagreement) and it does not account for the prima facie wrongness of undermining a person's individual freedom (Arnold, 2001: 54).
- ²¹ All 40 participants went beyond what the experimenters expected to be the breakoff point of 300 volts, 26 of them continued until the maximum of 450 volts (Milgram, 1963: 375–76).
- ²² For an alternative account of human nature and the foundations of morality informed by neuroscience, see, for example, Patricia Churchland (2011, 2019).
- ²³ For instance, studies suggest that physical disgust elicits feelings of moral disgust, and that the artificial manipulation of feeling can influence people's moral judgments (Eskine et al., 2011; Schnall et al., 2008).
- ²⁴ There is a debate on the different ways how such a collective intentionality can be conceived and how it relates to the intentionality of individuals who make up the collective. For an overview of this issue, see Schweikard and Bernhard Schmid (2021).

REFERENCES

- Alexander, Matthew. 2008. *How to Break a Terrorist: The U.S. Interrogators Who Used Brains, Not Brutality, to Take Down the Deadliest Man in Iraq*. London: Simon and Schuster.
- Allhoff, Fritz. 2014. "Ticking Time-Bombs and Torture." In *Contemporary Debates in Applied Ethics* 247–59. Malden, MA: Wiley-Blackwell.

- Al-Rodhan, Nayef. 2015. *The “Emotional” Amoral Egoism of States*. Montréal: The Montréal Review. <https://www.themontrealreview.com/2009/the-emotional-amoral-egoism-of-states.php>.
- Al-Rodhan, Nayef. 2021. *Emotional Amoral Egoism: A Neurophilosophy of Human Nature and Motivation*. Cambridge: The Lutterworth Press.
- Améry, Jean. 1980. *At the Mind's Limits: Contemplations by a Survivor*. Bloomington and Indianapolis, IN: Indiana University Press.
- Amnesty International. 2014. *Torture in 2014: 30 Years of Broken Promises*. London: Amnesty International. <https://www.amnesty.org/en/wp-content/uploads/2021/06/act400042014en.pdf>.
- Anscombe, G. E. M. 1957. *Intention*. Oxford: Basil Blackwell.
- Arnold, Denis G. 2001. “Coercion and Moral Responsibility.” *American Philosophical Quarterly* 38(1): 53–67.
- Bandura, Albert. 2016. *Moral Disengagement. How People Do Harm and Live with Themselves*. New York: Worth Publishers.
- Barry, Peter B. 2015. “The Kantian Case against Torture.” *Philosophy* 90(4): 593–621.
- Başoğlu, Metin, ed. 1992. *Torture and its Consequences: Current Treatment Approaches*. Cambridge: Cambridge University Press.
- Bentham, Jeremy. 1789/2014. *An Introduction to the Principles of Morals and Legislation*. Oxford: Clarendon Press.
- Bufacchi, Vittorio, and Jean Maria Arrigo. 2006. “Torture, Terrorism and the State: A Refutation of the Ticking-Bomb Argument.” *Journal of Applied Philosophy* 23(3): 355–73.
- Caspar, Emilie A., Julia F. Christensen, Axel Cleeremans, and Patrick Haggard. 2016. “Coercion Changes the Sense of Agency in the Human Brain.” *Current Biology* 26(5): 585–92. <https://doi.org/10.1016/j.cub.2015.12.067>.
- Churchland, Patricia S. 2011. *Braintrust: What Neuroscience Tells Us About Morality*. Princeton, NJ: Princeton University Press.
- Churchland, Patricia S. 2019. *Conscience: The Origins of Moral Intuitions*. New York: W. W. Norton and Company.
- Clemens, Justin. 2017. “Bentham, Torture, Modernity.” *Cogent Arts and Humanities* 4(1): 1390913. <https://doi.org/10.1080/23311983.2017.1390913>.
- Conroy, John. 2000. *Unspeakable Acts, Ordinary People: The Dynamics of Torture*. Berkeley: University of California Press.
- Davidson, Donald. 1963. “Actions, Reasons, and Causes.” *Journal of Philosophy* 60: 685–700.
- Decety, Jean. 2010. “The Neurodevelopment of Empathy in Humans.” *Developmental Neuroscience* 32(4): 257–67. <https://doi.org/10.1159/000317771>.
- Dershowitz, Alan. 2004. “Tortured Reasoning.” In *Torture: A Collection* 257–80. Oxford: Oxford University Press.
- Engel, Richard, and Robert Windrem. 2016. *Director Brennan: CIA Won't Waterboard Again—Even if Ordered by Future President*. New York: NBC News. <https://www.nbcnews.com/news/us-news/director-brennan-cia-won-t-waterboard-again-even-if-ordered-n553756>.
- Eskine, Kendall J., Natalie A. Kacinek, and Jesse J. Prinz. 2011. “A Bad Taste in the Mouth: Gustatory Disgust Influences Moral Judgment.” *Psychological Science* 22(3): 295–9. <https://doi.org/10.1177/0956797611398497>.
- Fair, Eric. 2016. *Consequence: A Memoir*. New York: Henry Holt and Company.
- Fiske, Susan T., Lasana T. Harris, and Amy J. C. Cuddy. 2004. “Why Ordinary People Torture Enemy Prisoners.” *Science* 306(5701): 1482–3. <https://doi.org/10.1126/science.1103788>.
- Galinsky, Adam D., Joe C. Magee, M. Ena Inesi, and Deborah H. Gruenfeld. 2006. “Power and Perspectives Not Taken.” *Psychological Science* 17(12): 1068–74. <https://doi.org/10.1111/j.1467-9280.2006.01824.x>.
- Gallagher, Shaun. 2007. “The Natural Philosophy of Agency.” *Philosophy Compass* 2(2): 347–57.
- Goodman-Delahunty, Jane, Nathalie Martschuk, and Mandeep K. Dhami. 2014. “Interviewing High-Value Detainees: Securing Cooperation and Disclosures.” *Applied Cognitive Psychology* 28(6): 883–97. <https://doi.org/10.1002/acp.3087>.
- Haggard, Patrick. 2017. “Sense of Agency in the Human Brain.” *Nature Reviews Neuroscience* 18: 196–207. <https://doi.org/10.1038/nrn.2017.14>.
- Harris, Lasana T. 2015. “Tortured Reasoning.” *Nature Neuroscience* 527: 35–6.

- Harris, Lasana T., and Susan T. Fiske. 2011. "Dehumanized Perception: A Psychological Means to Facilitate Atrocities, Torture, and Genocide?" *Zeitschrift für Psychologie* 219(3): 175–81. <https://doi.org/10.1027/2151-2604/a000065>.
- Hogeveen, Jeremy, Michael Inzlicht, and Sukhvinder S. Obhi. 2014. "Power Changes how the Brain Responds to Others." *Journal of Experimental Psychology: General* 143(2): 755–62. <https://doi.org/10.1037/a0033477>.
- International Committee of the Red Cross. 2016. *People on War: Perspectives from 16 Countries*. Geneva: International Committee of the Red Cross. https://www.icrc.org/en/download/file/31194/people_on_war_report.pdf.
- Jack, Antony I., Abigail J. Dawson, and Megan E. Norr. 2013. "Seeing Human: Distinct and Overlapping Neural Structures Associated with Two Forms of Dehumanization." *NeuroImage* 79(1): 313–28. <https://doi.org/10.1016/j.neuroimage.2013.04.109>.
- Janoff-Bulman, Ronnie. 2007. "Erroneous Assumptions: Popular Belief in the Effectiveness of Torture Interrogation." *Peace and Conflict Journal of Peace Psychology* 13(4): 429–35.
- Johnson, Robert, and Adam Cureton. 2021. "Kant's Moral Philosophy." In *Stanford Encyclopedia of Philosophy* Spring 2021; Edition. Stanford: Stanford University. <https://plato.stanford.edu/archives/spr2021/entries/kant-moral/>.
- Juratowitch, Ben. 2008. "Torture is Always Wrong." *Public Affairs Quarterly* 22(2): 81–90.
- Kant, Immanuel. 1785/1997. *Groundwork of the Metaphysics of Morals*. Cambridge: Cambridge University Press.
- Kleef, Van, A. Gerben, Christopher Oveis, Ilmo van der Löwe, Aleksandr LuoKogan, Jennifer Goetz, and Dacher Keltner. 2008. "Power, Distress, and Compassion: Turning a Blind Eye to the Suffering of Others." *Psychological Science* 19(12): 1315–22. <https://doi.org/10.1111/j.1467-9280.2008.02241.x>.
- Koh, Harold H., and Henry Shue. 2016. "Book Review Essay. Why Torture Doesn't Work: The Neuroscience of Interrogation. By O'Mara, Shane. Cambridge, MA: Harvard University Press 2015. 336 pp." *Political Psychology* 37(5): 753–7. <https://doi.org/10.1111/pops.12357>.
- Luban, David. 2005. "Liberalism, Torture, and the Ticking Bomb." *Virginia Law Review* 91: 1425–61.
- MacGillivray, Lindsey. 2009. "I Feel Your Pain: Mirror Neurons and Empathy." *Health Psychology* 6(1): 16–20.
- Mayerfeld, Jamie. 2008. "In Defense of the Absolute Prohibition of Torture." *Public Affairs Quarterly* 22(2): 109–28.
- Meyer-Parlapanis, Danie, and Thomas Elbert. 2015. "Torture and its Consequences, Psychology of." In *International Encyclopedia of the Social and Behavioral Sciences* 434–41. Amsterdam: Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.21020-9>.
- Milgram, Stanley. 1963. "Behavioral Study of Obedience." *The Journal of Abnormal and Social Psychology* 67(4): 371–8. <https://doi.org/10.1037/h0040525>.
- Naish, Katherine R., and Sukhvinder S. Obhi. 2015. "Self-selected Conscious Strategies Do Not Modulate Motor Cortical Output During Action Observation." *Journal of Neurophysiology* 114(4): 2278–84. <https://doi.org/10.1152/jn.00518.2015>.
- Office of the United Nations High Commissioner for Human Rights, Association for the Prevention of Torture, and Asia Pacific Forum of National Human Rights Institutions. 2010. *Preventing Torture: An Operational Guide for National Human Rights Institutions*. https://www.ohchr.org/Documents/Countries/NHRI/Torture_Prevention_Guide.pdf.
- Ojeda, Almerindo E., ed. 2008. *The Trauma of Psychological Torture*. Westport, CT: Praeger.
- O'Mara, Shane. 2015. *Why Torture Doesn't Work: The Neuroscience of Interrogation*. Cambridge, MA: Harvard University Press.
- Phillips, Joshua E. S. 2010. *None of us Were like this before: American Soldiers and Torture*. London: Verso.
- Physicians for Human Rights. 2005. Break Them Down: Systematic Use of Psychological Torture by US Forces. https://s3.amazonaws.com/PHR_Reports/break-them-down.pdf.
- Rejali, Darius. 2007. *Torture and Democracy*. Princeton: Princeton University Press.
- Russano, Melissa B., Fadia M. Narchet, Steven M. Kleinman, and Christian A. Meissner. 2014. "Structured Interviews of Experienced HUMINT Interrogators." *Applied Cognitive Psychology* 28(6): 847–59.
- Scheppele, Kim Lane. 2005. "Hypothetical Torture in the 'War on Terrorism'." *Journal of National Security Law and Policy* 1: 285–340.
- Schnall, Simone, Jonathan Haidt, Gerald L. Clore, and Alexander H. Jordan. 2008. "Disgust as Embodied Moral Judgment." *Personality and Social Psychology Bulletin* 34(8): 1096–109. <https://doi.org/10.1177/0146167208317771>.

- Schweikard, David P., and H. Bernhard Schmid. 2021. "Collective Intentionality." In *Stanford Encyclopedia of Philosophy* Fall 2021 Edition, edited by Johnson and Cureton. Stanford: Stanford University. <https://plato.stanford.edu/archives/fall2021/entries/collective-intentionality/>.
- Shue, Henry. 1978. "Torture." *Philosophy and Public Affairs* 7(2): 124–43.
- Shue, Henry. 2006. "Torture in Dreamland: Disposing of the Ticking Bomb." *Case Western Reserve Journal of International Law* 37(2): 231–9.
- Shue, Henry. 2015. "Torture." In *The Routledge Handbook of Global Ethics* 113–26. London: Routledge.
- Steward, Helen. 2011. "Moral Responsibility and the Concept of Agency." In *Free Will and Modern Science* 141–57. Oxford: Oxford University Press.
- Strasser, Steven, ed. 2004. *The Abu Ghraib Investigations: The Official Independent Panel and Pentagon Reports on the Shocking Prisoner Abuse in Iraq*. New York: Public Affairs.
- Sussman, David. 2005. "What's Wrong with Torture?" *Philosophy and Public Affairs* 33(1): 1–33.
- Taguba, Antonio M. 2004. AR 15-6 Investigation of the 800th Military Policy Brigade. ACLU-RDI 209: DODDOA-000248-308. https://www.thetorturedatabase.org/files/foia_subsite/pdfs/DODDOA000248.pdf.
- Tamm, Leanne, Vinod Menon, and Allan L. Reiss. 2002. "Maturation of Brain Function Associated with Response Inhibition." *Journal of the American Academy of Child and Adolescent Psychiatry* 41(10): 1231–8. <https://doi.org/10.1097/00004583-200210000-00013>.
- Tsakiris, Manos, Simone Schütz-Bosbach, and Shaun Gallagher. 2007. "On Agency and Body-Ownership: Phenomenological and Neurocognitive Reflections." *Consciousness and Cognition* 16(3): 645–60. <https://doi.org/10.1016/j.concog.2007.05.012>.
- United Nations. 1948. Universal Declaration of Human Rights. A/RES/217(III)[A]. <https://digitallibrary.un.org/record/666853>.
- United Nations. 1984. Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. A/RES/39/46. <https://digitallibrary.un.org/record/74216>.
- United States Senate Select Committee on Intelligence. 2014. Committee Study of the Central Intelligence Agency's Detention and Interrogation Program. <https://www.intelligence.senate.gov/sites/default/files/publications/CRPT-113srpt288.pdf>.
- Zaki, Jamil. 2019. *The War for Kindness: Building Empathy in a Fractured World*. New York: Crown.
- Zaki, Jamil, and Kevin N. Ochsner. 2012. "The Neuroscience of Empathy: Progress, Pitfalls and Promise." *Nature Neuroscience* 15(5): 675–80. <https://doi.org/10.1038/nn.3085>.

AUTHOR BIOGRAPHY

Professor Nayef Al-Rodhan is a neuroscientist, philosopher, and geostrategist. He is a Prize-winning scholar who was voted among the top 30 most influential neuroscientists in the world and has written 22 books and 250 articles. He was educated at the Mayo Clinic, Yale University, and Harvard University. Through many innovative books and articles, he has made significant conceptual contributions to the interplay between Neuroscience, Philosophy, International Relations, and Policy. He has applied this to the study of Human Nature, History, Global Security, National Security, Contemporary Geopolitics, Cultural Discourse, Global Futures, Frontier Cascading Risks, Outer Space Security, Synthetic Biology, Transhumanism, Artificial Intelligence, Human Dignity, Sustainable Governance, Conflict, Neurochemistry of Power, and War and Peace.

How to cite this article: Al-Rodhan, Nayef. 2022. "The Wrongs, Harms, and Ineffectiveness of Torture: A Moral Evaluation from Empirical Neuroscience." *Journal of Social Philosophy* 1–18. <https://doi.org/10.1111/josp.12494>