ON THE PSYCHOLOGICAL DIVERSITY OF MORAL INSENSITIVITY

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When we learn of atrocities committed by psychopaths and by suicide terrorists, we are shocked by the evident lack of normal feeling for their fellow human beings. (By suicide terrorists, I mean to include not just the people who have carried out suicide missions, but also the people who plan and organize such attacks.) How could anyone be so callous to the suffering of others? We recognize two significantly different psychological pathways to such insensitivity. I will maintain that psychopaths and suicide terrorists arrive at numbness through different routes. To see the two different paths to numbness, we must speak more broadly about different psychological processing models that can explain the appearance of deviant responses. In the first section, I will distinguish between midstream and upstream effects on psychological processing. Once that issue is settled, I will turn to the task of placing psychopaths into the framework. Psychopaths exhibit both insensitivity to suffering and a deviance in moral judgment. This plausibly derives from midstream deviance in the emotional processing system. We have no reason to think that the insensitiveness of suicide terrorists is similar at the psychological level. Psychopaths and suicide terrorists appear to have quite different moral psychologies. I will then characterize the ways in which suicide terrorists plausibly are insensitive to suffering in others. Suicide terrorists, I will suggest, exhibit numbness because of upstream psychological processes.

1. Two Paths to Deviance

To characterize the relations between suicide terrorists and psychopaths, we must distinguish between two radically different psychological routes to numbness. When a psychological system produces a deviant response to a given stimulus, we might explain this deviance in terms of upstream, midstream, or downstream effects. Let me begin with an abstract characterization; examples follow.

Suppose that we know that presenting a stimulus S produces a characteristic response R in most people, and we know that psychological mechanism M mediates the process. When we present S to a person who does not exhibit R, several explanations are possible. An upstream explanation is that something happened in the overall psychological system prior to M's processing; this upstream process either distorted or circumvented M's processing. A
A downstream explanation is that something happened in the psychological system after M’s processing; this downstream process prevented or distorted the normal response that follows M’s processing. A midstream explanation of the atypical response is that M, the psychological mechanism itself, operated in a way that deviates from the norm. For our purposes, the key distinction will be between midstream and upstream paths to numbness. So I will elaborate a bit on the nature of midstream and upstream effects.

A. Midstream Effects

Midstream effects include, most obviously, effects that result from defects to the processing mechanism itself. People with Broca’s aphasia often exhibit a peculiar deficit in syntactic recognition. For example, some such aphasics can evaluate active voice sentences, but not passive voice sentences. And a natural explanation of this is that brain damage has impaired the mechanism that does the job of syntax recognition. This would count as a midstream explanation of the atypical responses of Broca’s aphasics. A related sort of midstream explanation appeals not to brain damage but to congenital defects. For instance, people with Specific Language Impairment make systematic syntactic errors in speaking their native tongue. One kind of explanation for this atypical linguistic behavior is that a congenital defect in their syntax production system is present. Such midstream defects might also be induced by environmental deprivation, as in feral children who never develop normal syntactic abilities. The key commonality to these midstream explanations is just that the atypical response is supposed to result from deviance in the psychological mechanism itself.

Another way that midstream effects might occur is by fatiguing a system not itself deviant. A phenomenon known as “semantic satiation” provides a good illustration. When we present a word to a subject repeatedly (either visually or auditorily), the subject appears to gradually lose the meaning of the word. This is a familiar phenomenon you can try yourself. Take a word like “architecture” and say it 100 times. Gradually, the word starts to appear weirdly disconnected from its semantics. These phenomenological ruminations are corroborated by work in psychology. Linguists have studied semantic satiation for nearly a century, but one nice demonstration comes from a recent study by David A. Balota and Sheila Black.¹ They had subjects judge whether two visually presented words were semantically related (for example, royalty–king vs. royalty–box). Prior to this exercise, they presented subjects visual representations of one of the words (for example, royalty), either two, twelve, or twenty-two times. Results showed that for the younger subjects, exposure to more repetitions of the word resulted in worse performance in judging semantic relatedness. A natural explanation of these results is that the lexical access system is “satiated” with respect to this stimulus. Regardless whether semantic satiation is the right explanation, the suggestion provides an obvious sort of model for a different kind of midstream effect. The idea is just that a mechanism can become habituated to a kind of input, so that the mechanism will no longer produce the characteristic output given that input.

When we turn to the emotions, midstream effects might occur in either of these two ways. The emotion system might be deviant in some way, so that emotion system E in subject S does not produce the normal response for a given set of stimuli. For instance, a person might just fail to have a normal disgust system, and as a result he does not have the characteristic disgust response when encountering bodily fluids. Again, presumably such a defect could come about from a genetic defect, brain damage, or environmental deprivation. Significantly, the emotional mechanism itself is deviant.

Emotion systems might also exhibit the second kind of midstream effect. The emotion system in the subject might be perfectly normal, but the system gets habituated to an input so that it no longer produces the characteristic output. For instance, if persons are exposed to images of phlegm repeatedly over a thirty-minute period, their disgust system might gradually produce weaker and weaker responses to the input. Although the system is not damaged, it has become habituated to the visual presentation of phlegm and does not produce its characteristic output.

B. Upstream Effects

Sometimes a person fails to exhibit the modal response to a stimulus because of psychological processes that occur before input reaches the targeted mechanism. These kinds of upstream effects need not be the product of conscious intention, but they provide the best illustrations of upstream effects. Consider the Stroop Task. Subjects are presented with color terms (for example red, blue, yellow), which are printed in different colors (for example, the term “red” might be printed in blue ink). Subjects are told to report the color in which the word is printed. Subjects are much faster at the task when the color of the print matches the color word than when it does not. A clever subject might use upstream processes to beat the Stroop Task (or diminish the effect). If subjects intentionally blur their eyes, so that they cannot read the words, then the characteristic difference between matches and mismatches diminishes. In this case, the upstream cognitions have found a way to circumvent the typical processing that accompanies the Stroop Task. What subjects have done in such a case is prevent the input from getting to the lexical access system. So the lexical access system is perfectly normal, but it does not produce the characteristic output because it does not get the characteristic input. See Figure 1 for a tree that reviews the range of possible processing models we have considered. These kinds of upstream effects on psychological mechanisms can also occur for emotion systems.

Perhaps the best developed account of such upstream effects on emotion processing comes from Richard Lazarus’ work on coping. On being presented with cues that typically lead to affective response, we can use strategies to avoid or diminish the characteristic response. Lazarus defines coping state-
gies as "cognitive and behavioral efforts to manage specific external or internal demands... that are appraised as taxing or exceeding the resources of the person." On his view, coping is crucial because it allows us to change or even prevent an emotional reaction. This can occur in several different ways.

One way to cope is "by changing the way the relationship is appraised, and hence the relational meaning, and the resulting emotion"—if we change the way we conceive of the situation, this can alter the kind of emotional response we have. Coping can also occur "by affecting attention deployment, as in psychological avoidance, which takes a person's mind off the trouble." So, one obvious way in which we cope is by redirecting our attention away from thoughts about the troubling event or stimulus. Coping can provide a way to obviate the emotional process, and this is an upstream effect since this kind of coping occurs before emotion processing. The emotional mechanism itself, though, need not be deviant or habituated in any way. Instead, just as you can beat the Stroop Task by trying to prevent the input from getting to the lexical access mechanism, you can sometimes beat the emotional pain by preventing the input from getting to the emotion system.

2. Psychopaths: Moral Deviance and Midstream Numbness

Now that we have the general theoretical landscape laid out, we can try to see how psychopaths fit into it. We want to understand psychopaths' moral callousness. This callousness appears in two ways, as we will see in more detail below. First, psychopaths are insensitive to others' suffering; second, they have a shallow understanding of the character of moral prohibitions.

In James Blair's influential work on psychopathy, he finds that psychopaths show a general deficit in their sensitivity to suffering in others. Blair and colleagues showed images of people suffering to both psychopathic and nonpsychopathic criminals. While the subjects viewed these images, investigators measured subjects' physiological reactions over the next five seconds. Psychopaths exhibited significantly less physiological response than the nonpsychopaths did, suggesting that psychopaths have generally diminished basic responses to cues of suffering in others.

In another series of experiments, Blair found that psychopaths show deviant performance on a standard measure of moral judgment, the moral/conventional task. Previous work on moral judgment shows that subjects distinguish canonical examples of moral violations (for example, unprovoked hitting) from canonical examples of conventional violations (for example, standing up during story time). From a young age, children distinguish the moral violations from the conventional violations on several dimensions. For instance, children tend to think that moral transgressions are generally less permissible and more serious than conventional transgressions. Children are also more likely to maintain that the moral violations are "generalizably" wrong, for example, that pulling hair is wrong in other countries too. The children explained why moral transgressions are wrong in terms of fairness and harm to victims. For example, children will say that pulling hair is wrong because it hurts the person. By contrast, the children gave the explanation for why conventional transgressions are wrong in terms of social acceptability—talking out of turn is wrong because to do so is rude or impolite, or because "you're not supposed to." Further, they view conventional rules, unlike moral rules, as dependent on authority. For instance, if at another school the teacher has no rule prohibiting standing during story time, children will judge that standing during story time at that school is not wrong; but even if the teacher at another school has no rule against hitting, children claim that hitting is wrong.

Blair found that people with psychopathic tendencies perform abnormally on the moral/conventional task. Children with psychopathic tendencies are more likely than other children to say that moral violations (for example, unprovoked hitting) are acceptable if no rule against them has been established. While most people claim that moral violations like unprovoked hitting are wrong because they hurt the person, psychopaths tend to give social/ conventional explanations for why the moral violations are wrong ("it's not the done thing").

Psychopaths exhibit both emotional deviance and a deviance in moral judgment. Blair exploits this pair of deficits in psychopathy to develop an account of moral judgment. His theory splits into two parts. First, he maintains that normal humans have a "Violence Inhibition Mechanism" (VIM) triggered by distress cues, and this mechanism, he maintains, generates a sense of aversion when we witness cues of suffering. Second, he maintains...
that subjects treat events experienced as aversive in this way as nonconventional transgressions in the moral/conventional task. This VIM mechanism is damaged in psychopathy, according to Blair, and this explains the psychopath’s failure on the moral/conventional task. In normal subjects, the VIM produces negative affect, which generates moral judgment. Since psychopaths have a defective VIM, their moral judgment is correspondingly defective.

Blair’s VIM account of moral judgment and psychopathy has several problems. To see the deepest problem with the account, consider the crucial distinction between judging something bad and judging something wrong. Many occurrences regarded as bad are not regarded as wrong. Toothaches, for instance, are bad, but they are not wrong. The moral/conventional task is interesting primarily because it gives us a glimpse into judgments of bad (in one sense), it does not provide a model of judging something wrong. Many occurrences regarded as bad are not regarded as wrong. Toothaches, for instance, are bad, but they are not wrong. The moral/conventional task is interesting primarily because it gives us a glimpse into judgments of bad (in one sense), it does not provide a model of judging something wrong.

If the first part of Blair’s theory is correct, VIM produces a distinctive aversive response. As with toothaches, we might regard the stimuli that prompt this aversive response as “bad.” What class of stimuli is bad in this sense? Anything that reliably produces VIM activation. Distress cues will be at the core of this stimulus class. The class of stimuli that will be accordingly aversive will include distress cues from victims of natural disasters and accidents. The class of stimuli that VIM will lead us to regard as bad includes natural disaster victims and accident victims. That these things are wrong is also quite plausible. Natural disasters are bad. But, barring theological digressions, we do not regard natural disasters as wrong. Similarly, if a child falls down, skins its knee, and begins to cry, this will produce aversive response in witnesses through VIM. Yet the child’s falling down does not count as a moral transgression.

On the model that I prefer, the capability to draw the moral/conventional distinction depends on two quite different mechanisms. First, a body of information exists, a normative “theory” that specifies a set of harm-based normative violations. Second, Blair’s data indicate that an emotional mechanism also plays a key role in mediating performance on the moral/conventional task—affective response appears to infuse norms with a special status. Since psychopaths have a deficiency in their affective response to harm in others, this plausibly explains why they fail to treat harm norms as distinctive.

On this model, the normative theory and affective mechanism are plausibly dissociable. Children are sensitive to distress cues well before the second birthday. But one-year-old children presumably do not make moral judgments because they have not yet developed an understanding of the normative theory that will guide their moral judgments in the coming years. Psychopaths, on the other hand, appear to have a dissociation in the other direction. They show a deficit in affective response to suffering and this appears to compromise their ability to respond normally on the moral/conventional task.

But psychopaths apparently have a largely intact knowledge of the rules prohibiting harming others.

Psychopaths exhibit a kind of deviance in moral cognition plausibly tied to a deviance in their sensitivity to suffering in others. But what is the nature of this affective deviance in psychopaths, this numbness to others’ suffering? The most obvious explanation is a midstream explanation—in psychopaths, the emotional system that responds to distress cues is defective. This fits with Blair’s own recent proposal about the psychopath’s affective deviance—he maintains that the amygdala is centrally involved in responding to suffering in others and he finds that psychopaths exhibit amygdala dysfunction. So, the insensitivity in psychopaths plausibly derives from midstream effects of the first variety—their emotional system is deviant.

If psychopaths instantiate the first type of midstream effect, what about the second type? Can a person with a normal emotional system come to have their emotional system habituated to the cues of distress? Presumably. A couple of years ago, as I was about to undergo a root canal, I casually asked the endodontist, “So, have you become inured to seeing people in pain?” To my dismay, she casually replied, “yeah.” The endodontist was probably not a psychopath, but one explanation of her self-avowed numbness is that her emotional system has habituated to the signs of distress associated with root canals. Either her emotional system itself has habituated through long years of exposure, or perhaps in each particular surgery, the distress cues are initially upsetting, but the repeated exposure to a patient’s distress cues leads to numbness. Even if the endodontist’s numbness does not derive from habituation, the idea of habituation happening to people with normal emotional equipment is plausible. Just as our semantic system becomes less responsive in semantic satiation, our emotional systems will likely become less responsive in conditions of distress-cue satiation.

3. Suicide Terrorists and Psychopaths

In his contribution to this volume, Adolf Tobeña rightly notes that to compare psychopaths and suicide terrorists is instructive. But the differences, not the similarities, are what I view as especially significant.

We do not know whether suicide terrorists, like psychopaths, have generally diminished basic responses to the cues of another’s suffering. In particular, we do not know how they would respond to the images that Blair shows his psychopaths. But we have no reason to think that most suicide terrorists would have generally diminished responses to suffering. Because suicide terrorists support suicide missions does not demonstrate an absence of responsiveness to suffering in others. A person can be emotionally bothered by witnessing a soldier kill his enemy and still think that the action was morally permissible. A soldier might be emotionally bothered by witnessing the suffering he inflicts on his enemy and still think that his action was right. George Orwell illustrates this possibility especially well in Homage to Cata-
lona, writing, “When I joined the militia I had promised myself to kill one Fascist—after all, if each of us killed one they would soon be extinct.” Orwell does not waver from this view, but when he reports his participation in a skirmish, we get a revealing glimpse into his emotional reaction. Orwell and his fellow soldiers are attacking the Nationalists’ line and Orwell tries to throw a bomb at the point where an enemy rifle fired:

By one of those strokes of luck that happen about once a year I had managed to drop the bomb almost exactly where the rifle had flashed. There was the roar of the explosion and then, instantly, a diabolical outcry of screams and groans. We had got one of them anyway; I don’t know whether he was killed, but certainly he was badly hurt. Poor wretch, poor wretch! I felt a vague sorrow as I heard him screaming.

Although Orwell had wanted to kill a fascist, he cannot suppress his normal response to the salient cues of suffering coming from his enemy. But Orwell does not wallow in the feeling. He continues:

But at the same instant, in the dim light of the rifle-flashes, I saw or thought I saw a figure standing near the place where the rifle had flashed. I threw up my rifle and let fly.16

Similarly, because suicide terrorists kill civilians does not exclude the possibility that the suicide terrorists would have a negative emotional response to the distress cues of their civilian victims.

When we turn to the moral/conventional task, we know that psychopaths exhibit deviant performance, but again, we have no reason to think that suicide terrorists would perform abnormally on the moral/conventional task. On the contrary, Islamic fundamentalist terrorists, for example, appear to treat their moral commitments with the utmost weight. To test the emotional sensitivity and moral judgment of suicide terrorists would be enlightening. Currently, the most plausible bet is that suicide terrorists typically have the same emotional equipment and the same basic capability to make moral judgment as the rest of us.

While we have no reason to think that suicide terrorists have a deviant emotional mechanism akin to that found in psychopathy, a difference between suicide terrorists and the rest of us is obvious. Suicide terrorists have different norms than we have. Many suicide terrorists think that killing United States civilians is permissible. On this dimension, they deviate from the average Western European and North American. This distinction also distinguishes suicide terrorists from typical psychopaths imprisoned in Western Europe and North America. So the comparison between suicide terrorists and psychopaths reveals salient differences instead of similarities. For a review of the contrasts between suicide terrorists and psychopaths, see Table 1.

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<th>Perform normally on moral/conventional task</th>
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<td>Psychopaths</td>
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Table 1. Psychopaths and suicide terrorists

Why do suicide terrorists have such different norms from us if, as I have suggested, we share basically the same intact emotional systems? The obvious answer is Culture. Cultural forces play a vital role in determining which norms a person embraces. So, even though suicide terrorists likely have the same low-level responses to suffering in others that we do, they have been enculturated in ways that lead them to have different norms.

If the foregoing suggestions about suicide terrorists are right, they provide a further illustration of the dissociation between norms and emotions. We share much the same emotional equipment as suicide terrorists, and yet we have quite different norms. So our basic emotional equipment does not immediately dictate our norms. Instead, the norms we accept are partly dictated by our culture, and cultural forces can promote norms that do not fit well with our emotional endowment.

4 Suicide Terrorists: Upstream Numbness

So far, I have been maintaining that suicide terrorists do not diverge from us at the level of basic emotional equipment. Instead, they differ from us in their normative commitments. But this difference in norms can generate crucial differences in their sensitivity to suffering in others. We might explain the callousness of suicide terrorists because of upstream processing, coping. If they have the basic emotional equipment that the rest of us do, then to avoid the unpleasant emotional consequences of contemplating and witnessing the suffering of civilians, the suicide terrorists must find ways to deal with their emotions. They engage in what we might call norm-driven coping. Their different norms, different values, lead them to believe that to kill and injure civilians is morally acceptable, in some cases morally commendable. Given these norms, they learn to manage the emotional consequences of the actions of their group. One way they do this, presumably, is by redirecting their attention from the distress cues of the victims to the perceived wrongs perpetrated on their group.

Two observations about norm-driven numbness are in order. First, while the kind of numbness on which we are focusing is numbness to another’s pain, norm-driven numbness is not restricted to emotions in the moral domain. Plausibly, we have a norm that says you should tend your flu-stricken child,
even though doing so is often quite disgusting. Children with the flu have
trouble keeping bodily fluids confined to appropriate locations. But a parent
who does not clean his child’s vomit from the bathroom floor is a bad parent.
So, as a parent, you know you ought to clean up the vomit, and you are bound to
do so. The best you can do is cope with your disgust reaction. Presumably, we
do. We try not to think about or smell the vomit while we are on the floor with
the rags. Here then we have norm-driven numbness that does not stop up any
emotions in the moral domain. You ought to clean up your child’s vomit, and as
a result, you use coping strategies for circumventing your disgust response.

The second point is that norm-driven numbness to suffering is not re-
stricted to those against whom we moralize. Again, the parent-child relation-
ship provides a good example. If your child has a bad laceration, then you
should take the child to the doctor for sutures. But while you are there, you
will likely try to cope with your emotions by not looking as the doctor pushes
a needle through your child’s skin. Doctors even tell parents not to look.
When a parent copes with his emotional reactions in this way, we do not think
the parent is morally corrupt (I hope!). We even think it morally admirable, or
at minimum, appropriate and optimal, to be emotionally numb in some cases.
If you need to suppress your distress response to best help an accident victim,
obviously doing so is a good thing to do. The otherwise sensitive bystander
who circumvents his emotional response to help a victim is praiseworthy.

Norm-driven coping is not restricted to emotions in the moral domain.
Further, even for emotions in the moral domain, norm-driven coping is not
intrinsically objectionable. In many cases to try to manage and restrain your
emotions instead of letting them flourish makes sense. The kind of norm-
driven insensitivity exhibited in suicide terrorists is not different in psycho-
logical kind from the kind of norm-driven insensitivity that characterizes most
of us. Suicide terrorists, like the rest of us, exploit strategies for coping with
the emotionally difficult situations in which they find themselves. Figure 2
provides an overview of the psychological routes to insensitivity.

Figure 2. Processing models of insensitivity to others’ suffering.

Although the callousness of suicide terrorists shocks us, what is centrally
objectionable about suicide terrorists is not the numbness that they exhibit
towards others’ suffering. For if we shared their norms, to cultivate insensitiv-
ity by exploiting coping strategies would be sensible. No, what is objection-
able about suicide terrorists is not the numbness but the root cause of their
numbness—their norms. If the moral numbness of suicide terrorists is norm-
driven, what does this tell us about policy? Depressingly little. The way to
change suicide terrorists is to change the norms that they hold. We have no
recipe for that.

5. Conclusion

One of the most significant developments in recent moral psychology has
been the demonstration that emotions and emotional sensitivity play a crucial
role in normal moral judgment. This advance has encouraged the oversimpli-
fication of identifying particular moral judgments with particular emotional
responses. This oversimplification is plain in Blair’s work, because he is ad-
mirably explicit about the emotional responses implicated in moral judgment.
I have argued that, while emotions do play a crucial role in moral judgment,
the culturally taught norms also play a vital role, and the contribution of the
norms is partly independent of the contribution of the emotions. The moral
insensitivity of psychopaths is not that they learned different norms from the
ones we learned—psychopaths recognize which things their culture sanctions
and which it prohibits. Instead, the moral insensitivity of psychopaths appar-
tently comes from deviance within their emotional systems themselves. The
moral insensitivity of suicide terrorists, on the other hand, does not seem to
stem from deviance within their emotional systems. For all we can tell, they
have normal emotional mechanisms. Instead, the moral insensitivity of suicide
terrorists results from the norms they embrace.

Notes

1. D. A. Balota and S. Black, “Semantic Satiation in Healthy Young and Older
2. Richard S. Lazarus, Emotion and Adaptation (New York: Oxford University
3. Richard S. Lazarus, “Universal Antecedents of the Emotions,” The Nature of
    Emotion: Fundamental Questions, eds. Paul Ekman and Richard J. Davidson (New
5. R. L. Blair, “A Cognitive Developmental Approach to Morality: Investigat-
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