

## 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

*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.<sup>1</sup> 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 ha-

bituated 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 strate-

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.

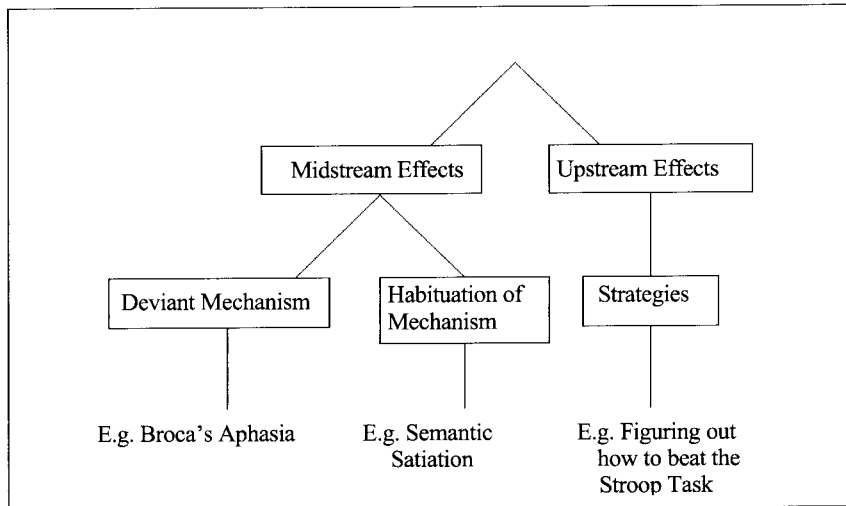


Figure 1. Processing models for deviant response patterns.

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.<sup>4</sup>

In another series of experiments, Blair found that psychopaths show deviant performance on a standard measure of moral judgment, the moral/conventional task.<sup>5</sup> 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.<sup>6</sup>

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.<sup>7</sup> 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”).<sup>8</sup>

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









