The Benefits and Costs of a Rose-Colored Hindsight

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Abstract
Self-serving biases lead people to see themselves and their future through rose-colored glasses. New research by Kouchaki and Gino suggests this rosy view also extends backward: memories of unethical behavior are less vivid than memories of good deeds. This so-called "unethical amnesia" has many individual benefits, but also carries social costs.

"A moral being is one who is capable of reflecting on his past actions and their motives – of approving of some and disapproving of others".

--Charles Darwin, The Descent of Man, and Selection in Relation to Sex

Charles Darwin argued that a defining feature of human morality is an ability to reflect upon past misdeeds (1). But recent work by Kouchaki and Gino (2) questions this ability. In nine studies, participants were asked to either remember events in which they cheated, imagine possible events in which they could have cheated, or were given the opportunity to actually cheat. A few days later, they were asked to recall the details of these events. In each of the studies, participants who cheated (or imagined cheating) recalled the events less vividly compared to participants who did not cheat. This so-called "unethical amnesia" only affected the experience of recollecting one's own immoral actions; people reported remembering vividly others' unethical behaviour, as well as personal events that were unpleasant but not immoral. Unethical amnesia had clear benefits for dishonest participants, relieving the emotional discomfort spurred by their immoral actions. However, unethical amnesia also had social costs: the less vivid and clear participants perceived their unethical past, the more they cheated again later. The findings are consistent with the idea that people seek to balance self-interest against maintaining a positive self-concept (3). Unethical amnesia allows people to behave selfishly while preserving a moral self-image.

What cognitive mechanisms might give rise to unethical amnesia? The fact that it was observed several days after cheating, but not immediately after, implicates biased retrieval rather than biased encoding. Research on motivated forgetting shows that suppression of unwanted memories during retrieval interferes with long-term retention of the undesirable memory traces (4). This effect is cumulative, so that the more times an unwanted memory is suppressed, the less likely it will be remembered. As a result, people might selectively forget the more unflattering chapters of their past. Such retrospective editing of memories in the service of a positive self-image in some ways resembles prospective editing of beliefs, which leads to unrealistic optimism (5). Here, the learning process is biased in a way that causes people to integrate good news but neglect bad news when updating their beliefs. The studies by Kouchaki and Gino imply that self-enhancing biases can operate retrospectively as well as prospectively. Studies of unrealistic optimism indicate that biased updating can lead to objectively inaccurate beliefs. One open question is whether unethical amnesia involves impaired objective memories of one's own actions as well as a diminished subjective

experience of remembering. In other words, do people actually forget the objective facts of their own misdeeds, or are they merely unwilling to conjure the dirty details when prompted?

Neuroscience research suggests that suppressing the retrieval of unwanted memories involves an inhibitory control process mediated by the lateral prefrontal cortex (LPFC) (4). During retrieval suppression LPFC not only banishes the unwanted memory from awareness, but also inhibits activity in hippocampal regions associated with episodic recollection and long-term storage. LPFC has also been implicated in unrealistic optimism, where reduced tracking of worse-than-expected information is associated with a failure to integrate bad news into one's beliefs about the future (5). We speculate that LPFC may also be involved in unethical amnesia, with LPFC activation during the recall of unethical past behavior suppressing uncomfortable memories from consciousness and reducing the likelihood of recalling them in the future. Curiously, LPFC also plays a central role in following moral rules. LPFC is activated when people comply with fairness norms and resist temptations to lie, and disrupting activity in this region reduces norm compliance (6). Thus, the same brain region that curbs lying and cheating might shift gears once a moral transgression has occurred, controlling potential damage to one's image by suppressing memories of the transgression – a sort of neural public relations manager.

Unpacking the temporal dynamics of unethical amnesia can also clarify the influence of past unethical behaviour on present moral conduct. Sometimes past misdeeds can lead people to compensate with increased moral behavior, a phenomenon known as "moral compensation", but this is not always observed (7). In particular, recollecting past good behavior seems to exert more consistent and stronger effects on subsequent moral decisions than recollecting past negative behaviour. Kouchaki and Gino's study offers a potential explanation: flattering memories may influence current behavior more strongly than unflattering ones because memories of good deeds are more vivid, clear and detailed than memories of bad deeds. This observation also suggests we may need to re-evaluate studies that compared the effects of recalling good and bad deeds on behavior, since these memories appear to be mismatched in vividness and detail. Furthermore, because unethical amnesia might take time to develop, there may be a limited time window in which moral compensation can occur: perhaps only in the immediate aftermath of a transgression, when people can still remember their bad behavior, are they likely to engage in compensatory behavior.

Darwin's claim that morality requires memory raises the question of why unethical amnesia evolved in humans. We suggest that unethical amnesia benefits individuals both by protecting against psychopathology (**Box 1**) and by facilitating social impression management. Because a commitment to moral rules increases one's attractiveness as a social partner (8), people have a strong incentive to convince others they will stick to those rules, and one reliable strategy for persuading others is to first persuade oneself (9). Conveniently forgetting the times you broke the rules makes it easier to convince yourself and others that you are a stickler for the rules. Indeed, a difficulty with recalling past moral transgressions may itself serve as a cue for inferring good character. Our tribal instincts may very well extend these self-deceptive memory biases to other members of our group. Examples of such collective amnesia unfortunately litter the pages of history books, where whitewashed narratives replace the despicable episodes many would rather forget. Despite the tempting benefits of unethical amnesia, we must beware its social costs.

Box 1: Individual costs of impaired unethical amnesia

After a moral transgression, people can react either with guilt ("I did something bad") or with shame ("I'm a bad person"). Shame, but not guilt, has been persistently linked with mood and anxiety disorders, where a transition from guilt to shame following a moral transgression sets off persistent rumination and self-criticism, leading to symptoms of depression and anxiety (10). We suggest that unethical amnesia may help prevent a maladaptive transition from guilt to shame. Feelings of guilt experienced immediately after committing a moral transgression may induce a motivation to make amends, but once the episode has passed unethical amnesia may prevent intrusive memories of past misdeeds from tarnishing one's self-concept, thus curtailing the development of shame. Those who are unable to actively forget unpleasant aspects of one's past may therefore have a higher risk of developing negative self-views. Consistent with this idea, the same disorders associated with high levels of shame also involve deficits in inhibiting unwanted thoughts and memories. (4). A particularly noteworthy phenomenon is scrupulosity, a variant of obsessive-compulsive disorder where people obsess over the possibility they have committed a moral transgression (11). Future studies might investigate whether impaired unethical amnesia can predict later development of shame-related psychopathology.

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