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The Possibility of Epistemic Nudging: Reply to Grundmann

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In “The Possibility of Epistemic Nudging” (2021), Thomas Grundmann examines nudging as applied to doxastic attitudes. Grundmann argues that given the right presuppositions about knowledge, justified beliefs, and the relevant belief-forming processes, doxastic nudging can result in justified beliefs and even knowledge in the nudgee. In this short response we will raise some critical concerns for Grundmann’s project as well as open up a path for epistemic nudges (nudges that result in justified beliefs or knowledge) that Grundmann too quickly dismisses.

A ‘nudge,’ as defined by Thaler and Sunstein (2009), refers to “any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives.”¹ Nudges are interventions to the way options are presented that influence people’s decisions without limiting available options and without coercion. Nudgees are able to easily resist the influence and choose another available option, for which it is said that nudges preserve the nudgees’ freedom of choice. Although not always, nudging often relies on automatic, non-rational cognitive mechanisms, such as biases (e.g. priming, anchor effects, confirmation bias, etc.), to influence people’s choices.² In other words, nudging typically influences people’s behavior and choices without engaging their reasoning capacities. Further, nudges can either benefit or harm the nudgee. In cases where the nudgee is benefitted, the nudge is an instance of what Thaler and Sunstein (2009) call ‘Libertarian Paternalism’.³

Nudging and Doxastic Attitudes

In his paper, Grundmann argues that nudging can be applied to doxastic attitudes. He focuses on what he calls ‘brute intentional doxastic nudging’. That is, intentional nudges that are exclusively targeted at *shallow cognitive processes*, i.e. automatic, non-rational cognitive mechanisms that are neither fully deliberative nor reflective (2–3). According to Grundmann, someone who is doxastically unresponsive to evidence can be nudged into forming beliefs or other doxastic attitudes. Grundmann makes the move from behavioral nudging to doxastic nudging by arguing that we can intentionally trigger automatic belief-forming mechanisms in order to make people believe certain propositions without giving them any reasons, but rather by triggering their biases. He defines *brute intentional doxastic nudging* as follows:

A, intentionally and brutally, nudges B doxastically to have doxastic attitude DA=df. A acts in a way that intentionally makes it more likely that B will have DA by triggering B’s shallow cognitive processes, while A’s influence

¹ Thaler and Sunstein (2009, 6).

² Nudges that do not involve deliberation, but instead operate automatically, quickly, and unreflectively, engage System 1 processes. Nudges that trigger reasoning and operate consciously and reflectively, engage System 2 process. For more on these processes, see Kahneman (2011).

³ Two common misconceptions often found in the literature are (i) that all nudges are intentional, and (ii) that all instances of nudging are interventions grounded by Libertarian Paternalism. In his paper, Grundmann does a good job avoiding both misconceptions by explicitly stating his focus on *intentional* nudges and recognizing the difference between instances of nudging and instances of Libertarian Paternalism. For a conceptual analysis that dispels both misconceptions, see Joly Chock (2020).

preserves both the represented facts and B's rational control concerning DA (3).

In extending nudging from the behavioral to the epistemic realm, Grundmann adjusts the definition of nudging in three ways. First, he changes the target of nudging from choices and behaviors to doxastic attitudes. Second, Grundmann establishes that, in doxastic nudging, the relevant factors that must stay fixed—i.e. must not be limited—comprise facts instead of choice options. Third, he substitutes freedom of choice with rational control over doxastic attitudes, which means that the nudgee retains the ability to revise her doxastic attitudes in light of further evidence.(3–4). Grundmann claims that, like with behavioral nudging, doxastic nudging can be (epistemically) harmful or beneficial. When harmful, doxastic nudging leads to false beliefs. When beneficial, doxastic nudging leads to true beliefs, and can even result in *epistemic nudging*, which is doxastic nudging that results in justified beliefs or knowledge.

Grundmann's goal is to make way for epistemic nudges despite their bleak prospects. Why might the prospects for epistemic nudges be bleak? It is commonplace in epistemology to distinguish between propositional justification and doxastic justification. For an individual to be propositionally justified in believing a proposition, she must have adequate epistemic grounds for believing it.⁴ For her *belief* to be justified it must be based on those epistemic grounds that support it (e.g. caused by the supporting evidence, brought about by a reliable belief-forming process, etc.). Doxastic justification is this later form of justification which requires that the belief be properly based. Since nudges utilize non-epistemic factors (i.e. triggering biases) to bring about the target beliefs, the resulting beliefs appear to have epistemically *inappropriate* bases—what brings about the belief is not a proper epistemic ground for the belief. Further, this problem for the justification of beliefs extends to knowledge since knowledge requires doxastic justification. As Grundmann claims, “If knowledge requires either the epistemic agent's competent performance (as virtue theories of knowledge claim), or being based on adequate evidence (as evidentialist views have it), then [the nudgee] lacks knowledge in [cases of doxastic nudging]” (7).

Nudging, Evidentialism, and Knowing

Having dismissed the possibility of epistemic nudging on evidentialist and virtue theoretic accounts, Grundmann proposes his own account which appeals to a kind of social reliabilism. Following Sandy Goldberg (2010), Grundmann suggests that we individuate the belief-forming processes externally, so as to include the nudger as part of the relevant process.⁵ So individuated, the belief-forming process can be seen to be robustly reliable since (at least given the right kind of nudger) it will reliably result in true beliefs in the nudgee. So, Grundmann claims, doxastic nudging can result in justified beliefs. In addition, such a method of belief-formation can satisfy the safety condition, on the assumption that knowledge is safe belief, doxastic nudging can also result in knowledge. Given these considerations, Grundmann claims that epistemic nudges are possible.

⁴ We use the term 'grounds' here so as to be neutral between different account of what features provide a subject with propositional justification.

⁵ This parallels Goldberg's testimonial account where the relevant belief-forming process includes the testifier.

Before turning to a critical examination of Grundmann’s proposal, it is worth pausing to see if the prospects of epistemic nudging are as dim for evidentialism as Grundmann supposes. Recall that the problem here is that nudging involves the use of non-epistemic factors to bring about a belief in the nudge. So, it appears that the resulting belief is not appropriately based—it is not based on the evidence that supports it (even if the subject does possess that evidence, as Grundmann supposes).⁶ At issue here is how to think about proper basing.⁷ Grundmann seems to take for granted a causal account of basing, according to which the epistemic grounds of a belief must be the cause of the belief for the belief to be justified.

While causal accounts of basing are prevalent, they are not the only game in town. Doxastic accounts of basing maintain that a belief is properly based so long as the subject has the appropriate meta-belief. While different accounts offer different candidate meta-beliefs, a common proposal is that it suffices for proper grounding that the subject believes that her grounds are good grounds for her target belief.⁸ So, according to such accounts of basing, a subject’s belief that *p* is based on her reasons when she believes that her reasons support her belief—she takes them to be her grounds. Importantly, such accounts do not require that the target belief be produced or maintained by those grounds; no causal connection between the reasons and the belief is required. Applied to the case at hand, the fact that the subject’s belief was brought about by the triggering of some bias does not prevent her belief from being properly based (and thus justified), so long as the relevant meta-belief is also held by the subject.⁹ So, when coupled with a doxastic account of basing, the obstacle between evidentialism and epistemic nudging is cleared.¹⁰

Further, even when paired with causal accounts of basing, evidentialism does not prevent the possibility of epistemic nudging. The causal influence of a non-epistemic (or even epistemically suspect) factor need not prevent the resulting belief from being properly based (and thus doxastically justified) even on causal accounts of basing. If it did, then given the kind of creatures that we are, it seems that we would fail to have many (if any) justified beliefs at all. Rarely, if ever, are our epistemic grounds the sole contributing causal factor to our beliefs. So, more plausible causal accounts of basing will only require that there be a *suitably strong* causal connection between the subject’s reasons and her belief.¹¹ Important to our purposes here, such a connection can obtain even when a non-epistemic (or even epistemically suspect) factor plays the final triggering role in bringing about the belief in question.¹² The subject’s evidence can be a cause of her belief even without being the proximate cause. So, even when coupled with causal accounts of basing, evidentialism can

⁶ Here we will talk about ‘evidence’ as opposed to ‘grounds’ since we are concerned with evidentialism.

⁷ For a helpful overview, see Korcz (2010).

⁸ For instance, see Leite (2008).

⁹ In fact, Grundmann’s POLITICAL LOYALTY case is not too dissimilar from Keith Lehrer’s GYPSY-LAWYER case which is often thought to raise problems for causal accounts of basing and is used to motivate doxastic accounts. See Lehrer (1971).

¹⁰ Similar considerations apply to hybrid accounts of basing according to which both doxastic conditions and causal conditions suffice for proper basing. See Korcz (2000).

¹¹ For such an account, see McCain (2012).

¹² This is particularly clear in cases where the subject would have believed the target belief from the outset given her reasons, but some bias prevented her from doing so. In such cases, the doxastic nudge is simply helping the reasons overcome this causal block.

allow for epistemic nudges. Epistemic nudging is only a problem for evidentialism when it is saddled with implausible accounts of proper basing.

In fact, the prospects for evidentialist epistemic basing seem more promising than the prospects for Grundmann's preferred proposal. First, Grundmann's externally individuated belief-forming processes confront the generality problem. Grundmann identifies the relevant belief-forming process type as something like "forming beliefs when steered by a particular nudger" (8). In order for this process to be reliable, the nudger must herself be reliable at getting the desired results (in addition to knowing what they are and having the appropriate desires). With respect to the nudger, we can wonder whether the relevant kind of reliability is with the nudger's nudging in general (action-guiding as well as belief-guiding), merely her doxastic nudging, merely her doxastic nudging in this particular way (i.e. affect heuristic), merely her doxastic nudging in this particular way at this point in time, etc.. Any given nudger can differ in terms of their reliability along each of these lines and it is far from clear which type of reliability is supposed to be relevant to our epistemic assessments.¹³

Second, Grundmann's proposal relies on the assumption that knowledge is safe belief and that reliably produced beliefs are justified. Each assumption is problematic. While there are numerous powerful objections to safety and reliabilism in the literature, our focus here will simply be on the implausible verdicts these assumptions would have in cases of doxastic nudging. On Grundmann's assumptions, we would get the result that the subject would have knowledge due to doxastic nudging even in cases where she had absolutely no evidence regarding the truth of her belief.¹⁴ On the assumption that knowledge is safe belief, and the relevant belief-forming process includes the (reliable) nudger, then nudgees can come to have knowledge even in cases where they haven't the slightest reason to think that their belief is true. Since the safety of their belief is established externally, the nudgee need not have anything internally that indicates that their belief is true. This is an implausible consequence.

Further, this problem extends to what Grundmann says about justified beliefs brought about by nudges. Let's grant that belief-forming processes are to be externally individuated as Grundmann supposes and that the doxastic nudges of the relevant type are reliable. In such cases of doxastic nudging, the resulting belief will be brought about by a reliable belief-forming process, yet the subject may have no reason whatsoever to believe the proposition in question is true. Such cases are reminiscent of Norman the clairvoyant.¹⁵ While Norman's belief is the product of a reliable belief-forming process, from his perspective the truth of his belief appears as a mere accident. If we externally individuate belief-forming processes in the way that Grundman proposes, then once we grant that the relevant kind of reliability

¹³ This problem is just the generality problem which confronts any epistemological account that connects an epistemic property to a property of a belief-forming process. For a statement for the generality problem see Conee and Feldman (1997). For an argument that evidentialism does not face a similar problem when it comes to basing, see Matheson (2015).

¹⁴ In Grundmann's case the subject also possesses evidence for the truth of the proposition in question, but this is not required for knowledge on the assumption that knowledge is safe belief, or for a justified belief on the assumption of reliabilism.

¹⁵ See Bonjour (1980). For an argument that subjects in such a circumstance always have a defeater for justification of their belief, see Goldberg and Matheson (2020). Grundmann could add a 'no defeater' condition, but as we will see later, reliable nudges do not appear to be necessary either.

obtains, nudgers could bring about justified beliefs in their nudgees even when the truth of those beliefs would seem accidental to the nudgees.¹⁶ This is an implausible result that shows the important role that evidence must play.

Finally, there is good reason to doubt that the reliability of such an externally individuated belief-forming process is necessary for epistemic nudging (for the resulting belief to be justified or known). We have seen above that doxastic nudging does not preclude proper basing. We maintain that a nudgee's belief can be justified and known even in cases where the nudger is not reliable. If the nudger is able to get one nudgee to believe on her evidence despite a bias that was getting in the way before, then her belief can be justified even if the nudgee is not successful with other members in the group (perhaps they have stronger biases getting in the way).

Further, although a lot of cases of behavioral nudging are reliable in the sense of being more effective than not,¹⁷ this is not always the case.¹⁸ If doxastic nudging's effectiveness is comparable to behavioral nudging, then this raises an issue for Grundmann's account. According to his view, if the nudger's nudging is not systematic and effective, then the nudger is unreliable, and thus, the nudgees cannot attain justified beliefs or knowledge via the nudger's nudging. Grundmann's view, then, fails to account for people who are effectively nudged as a result of broadly unreliable doxastic nudges—i.e. nudges that are unreliable because only the *minority* of people are successfully nudged.

Reliable Nudging

In Grundmann's *Political Loyalty* example, political party members are not doxastically responsive to the evidence of their leader's (John) guilt in a murder case. Alicia, the court's public relations manager, attempts to nudge party members by framing the story of John's trial in a way that depicts him as unsympathetic and suspicious. Alicia also uses unflattering pictures to make John appear ugly. The mechanism employed by Alicia here is the affect heuristic, according to which a person relies on their answer to an easy question (in this case, do I like John?) to answer a harder question (is John guilty?).¹⁹ As a result of this nudge, most of the party members end up believing that John committed the murder. (7) According to Grundmann, in *Political Loyalty*, Alicia satisfies all three conditions to be a reliable nudger:

¹⁶ There is an important difference here between Grundmann's use of externally individuated belief-forming processes and Goldberg's use of them in testimonial cases. In Goldberg's testimonial cases the subject is still receiving testimony from the speaker and so is getting reasons to believe the truth of the proposition as part of the process. In Grundmann's doxastic nudging, the nudger need not provide the subject with any positive reason to believe the relevant proposition but can instead merely activate the relevant biases to bring about the desired result. For an evidentialist criticism of Goldberg's externally individuated testimonial account, see Matheson (forthcoming).

¹⁷ See Thaler and Sunstein (2009) for specific examples on the increase of retirement savings (105–19), organ donations (177–84), healthy food consumption (262–3), recycling (267–8), and the reduction of energy consumption (258–61) and urine spillage in public restrooms (268).

¹⁸ See Sunstein (2017).

¹⁹ See Kahneman (2011, 97-104).

- (i) she is knowledgeable about John's guilt;
- (ii) she is epistemically benevolent towards the party members, as she wants to inform them of this fact, and;
- (iii) her nudging is systematic and effective in a way that the group is safely steered to true beliefs about John's guilt (8).

Political Loyalty is a case of doxastic nudging that is *extremely* effective.²⁰ However, it is not so obvious that a nudge like this would be as effective in real life. Alicia may not satisfy condition (iii) in the real world, as her nudging may not be effective enough due to other factors, such as potentially stronger biases that affect John's political party members (e.g. partisan bias, groupthink, confirmation bias, etc.).

Suppose that in *Political Loyalty*, the nudge is unsuccessful and the majority of the group is not moved by Alicia's nudge. However, Mia is. This would mean that Alicia's nudging is not systematic and effective in the way needed for her to be a reliable nudger, and for the nudgees to attain justified beliefs or knowledge. The verdict of whether Alicia is a reliable nudger, depends on whether her nudging is reliable in the sense that it effectively nudges more members than not. If Alicia's nudge is not reliable in this way, then, according to Grundmann's account, Mia's resulting belief cannot be justified and she cannot attain knowledge. But, is it fair that Mia, who was effectively nudged to believe that John is guilty, pays the price of not holding a justified belief or not having knowledge because the majority of the group was not effectively nudged like her? This does not seem right.

It is reasonable to think that, although most people in the political party were not effectively nudged, Mia is. And that her resulting belief that John is guilty is justified/knowledge. Mia clearly ends up with a justified belief/knowledge about John's guilt, even if she was the only one nudged in the group. Grundmann's account fails to capture this, but the evidentialist alternative does a better job, as it allows for Mia's belief to be justified/knowledge given proper basing, independently of how reliable the nudger is and how many other members of the party are effectively nudged.²¹

²⁰ An example of an ineffective doxastic nudge could be shock persuasion—using shocking images to change people's beliefs about a particular topic. Contrary to what is commonly believed, disturbing photos do not make much of a difference in people's opinions regarding the relevant topic. For example, shocking COVID-19-related images (e.g. of hospital workers lifting corpses in body bags onto a refrigerated semitrailer) do not change most people's beliefs about COVID-19 threats. After viewing the images, some people who already perceive the virus as a threat become even more convinced of its risks. However, people who already doubt the virus' danger are not nudged into believing there is a threat. Instead of nudging them towards true beliefs, the images lead doubters to reinforce their already-held beliefs. See Ballantyne, Celniker, and Ditto (2020).

²¹ A similar example outside the political realm in which having an extremely effective nudge seems implausible is a case where a representative of a product evaluation agency publishes ads depicting a particular brand poorly in an attempt to nudge that brand's already loyal customers to believe that the brand is bad (e.g. poor quality, detrimental to consumers' health, etc.). It is hard to see how such a nudge would be effective over the customers' brand loyalty, even when the representative of the product evaluation agency is knowledgeable and benevolent towards the consumers. In this case, too, even if the majority of consumers are not nudged, it seems reasonable to think that those who are, hold a justified belief/knowledge about the brand in question.

So, if we are looking for promising cases of epistemic nudges, it is better to examine their prospects on evidentialism.

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