We are not as rational as we think. While we like to believe that our decisions are the result of rational reflection, the truth is that many factors we are unaware of regularly influence our thinking and decision-making. Advances in cognitive and behavioral science over the past several decades show that the way options are presented—now commonly referred to as “choice architecture”—strongly influences our decisions: we tend to react to a particular option differently depending on how it is framed or positioned in relation to other options. This claim is supported by the pioneering “heuristics and biases” research conducted by the psychologists Amos Tversky and Daniel Kahneman.1 “Heuristics” refers to the rules of thumb people use to form judgments and make decisions. Although often accurate and useful, heuristics can sometimes lead to systematic errors in reasoning, or cognitive biases.2 Some examples of cognitive biases include people’s tendency to rely too heavily on initial suggestions (anchoring), to favor preselected options (default effect), to prefer avoiding losses over making gains (loss aversion), and to do things merely because other people do them (bandwagon effect).3

Based on this research on cognitive heuristics and biases, Richard Thaler and Cass Sunstein came up with the idea of a “nudge,” which they define as “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.”4 Nudges do not change what options are presented, only how they are presented. Simply put, nudges influence people’s choices and behaviors without limiting their options. Reminders, warnings, and suggestions are familiar examples of nudges. Bans, mandates, and threats, by contrast, are not, since they limit available

options. Like a GPS device in a car, which can suggest the best route but does not force the driver to take that route, a nudge can be a way of trying to influence people without coercing them. Both the driver of the car and the person being nudge—the “nudgee”—remain free to choose another available option.

Nudging, then, is the practice of influencing people’s decisions and behaviors in predictable but noncoercive ways by controlling the structure of a choice situation. Thaler and Sunstein call a person who intentionally designs such choice situations a “choice architect.” Although based on this definition, each of us plays the role of choice architect at one time or another, designers are particularly salient examples of choice architects, as their work frequently calls on them to structure the choices or decisions that other people—potential customers, clients, or citizens, for example—need to make. For instance, a simple change of default options in organ donation forms can significantly impact someone’s decision to become a donor. One study shows that when forms have an opt-in default (i.e. requiring explicit consent; people have to check a box if they wish to participate), less than 20% of people typically become donors. When forms instead have an opt-out default (i.e. presuming consent; people have to check a box if they do not wish to participate) over 98% of people agree to become donors. This disparity is due to the default effect—our tendency to stick with what is preselected, regardless of what that is. Similar nudges have been effectively used to increase retirement savings and recycling, and to reduce pollution and speeding, among other things.

ETHICS OF NUDGING: CRITERIA

Designers have been intentionally influencing people’s choices and behavior for a long time. However, the recent research on humans’ cognitive biases and limitations has raised the ethical stakes for all choice architects by revealing just how influential they can be in eliciting certain outcomes as opposed to others. The question thus arises: when, or under what circumstances, is it ethically acceptable to nudge someone? Thaler and Sunstein claim that nudging can indeed be ethical. They acknowledge that it is possible to nudge for good or bad, and argue that nudging is ethical only when done “for good.” According to them, to nudge for good requires that a nudge meet two conditions: the nudge must be (1) easy to resist and (2) aimed at increasing the welfare of those being nudged.

According to Thaler and Sunstein, condition (1) requires that the nudge be “easy and cheap to avoid”—that is, the nudgee must be able to easily choose a different available option, or none of the options presented. Condition (2) requires that the nudge be sincerely intended to make people better off, as judged by themselves: nudgers must have nudges’ best interests in mind. To “nudge for good,” then, is to nudge in accordance with these two conditions.

4 Thaler and Sunstein, Nudge, 6. Although in their definition of a nudge, Thaler and Sunstein refer explicitly to “economic” incentives, it has been widely accepted in the ensuing literature (including by them) that a more charitable definition takes into account other kinds of incentives as well.

5 Policymakers, salespeople, doctors, waiters, and professors provide additional examples of choice architects who nudge.


7 Thaler claims that whenever he is asked to autograph a copy of the book he co-authored with Sunstein, he signs with the plea: “Nudge for Good.” See nytimes.com/2015/11/01/upshot/the-power-of-nudges-for-good-and-bad.html.

8 Note that the conditions of noncoerciveness and intended welfare promotion correspond respectively to the operative terms in “libertarian paternalism,” the theoretical position Thaler and Sunstein stake out in Nudge.

9 Thaler and Sunstein, Nudge, 6.

10 Sunstein explores the meaning of this key phrase in “‘Better Off, as Judged by Themselves’: bounded rationality and nudging” in Riccardo Viale, ed., Routledge Handbook on Bounded Rationality (New York: Routledge, 2021), 563–569.
A classic example of nudging for good involves food placement. Studies show that consumers tend to choose products depending on their placement. In the context of a cafeteria buffet, over 75% of people select the first food that they see, and the first three foods encountered comprise 66% of everything patrons select. So the way different foods are ordered and presented in a cafeteria substantially impacts what the cafeteria’s patrons actually eat. Combining this fact with the observation that choices have to be presented in some specific way, even if unintentionally, Thaler and Sunstein develop an example in their book focused on the question how a cafeteria ought to be laid out: should the cafeteria’s designers try to organize the presentation of different foods (a) at random, (b) so as to maximize profits, (c) so that diners are encouraged to eat healthier foods, or (d) by eliminating unhealthy foods from the cafeteria altogether? Option (d) limits the available options, so it is not a nudge, but rather a ban. The remaining options (a-c) are all nudges because they do not make it significantly more difficult for diners to choose other available food options. However, not all are ethical nudges according to Thaler and Sunstein’s “do good” criterion: options (a) and (b) are not ethical. Option (a) fails because arranging the food at random does not take the diners’ best interests into account; option (b) would likely fail both conditions, leaving patrons nutritionally and financially worse off than they might otherwise be. Therefore, among this set of options, only (c) is ethically justified.

A concern with Thaler and Sunstein’s “nudge for good” approach is that it may not always be feasible to meet their two proposed conditions in practice. Specifically, condition (2) may exclude some nudges that would be considered ethically permissible by most people, in particular nudges that do not make the nudgees better off, but do not make them worse off either. A random distribution of food items in a cafeteria, not intentionally guiding patrons toward any particular items over any others, would appear to exhibit this sort of ethical neutrality. Of course, cafeterias and food markets more typically place products with the goal of maximizing profits. In doing so, they are by definition not nudging for good, but they are not necessarily nudging for bad, either. It is wrong for business owners to nudge merely for profit while ignoring their customers’ welfare. But is there anything wrong with their aiming to increase profits while also being conscious of their customers’ welfare and making sure, at a minimum, that their welfare is not being harmed or undermined in any way? A store or cafeteria stocked with food items that are both highly nutritious and that support large profit margins is clearly a logical possibility. Based on such a possible scenario, I believe that a more reasonable and realistic standard for the assessment of nudges is that nudges must be expected not to produce any significant harm for the nudgees—that is, nudges must not make nudgees worse off, as judged by themselves.
This is a lower ethical standard than that proposed by Thaler and Sunstein, since not making nudgees worse off can happen without necessarily making them better off. Modifying the account advanced in Nudge, I now propose that to be ethical, a nudge must meet the following two conditions: the nudge must (1) be easy to resist and (2) produce no significant harm for the nudgee. Condition (1) is shared between Thaler and Sunstein’s account and the account proposed here. The difference between my proposed “no harm” standard and Thaler and Sunstein’s “do good” standard is that my condition (2) is less limiting. It allows for nudges that are intuitively ethical and broadly accepted—but not permissible under Thaler and Sunstein’s more stringent criterion—to be implemented, and thus expands the extent to which nudging can be ethically integrated as a strategy within design practice.

Before proceeding, it is important to clarify that it is possible for various criteria for the ethical use of nudges to coexist. The goal of proposing the “no harm” criterion is not to reject Thaler and Sunstein’s “do good” criterion out of hand. Instead the goal is to suggest that a more attainable standard for the ethical use of nudges is needed in order to account for the full range of actual and possible initiatives that would be considered ethically acceptable by most people, and to propose such a standard. Both criteria might coexist, supporting an understanding of different kinds of nudges as being ethically permissible in different ways or contexts. My specific claim here is that the “no harm” criterion is the lowest bar that a nudge must meet in order to be ethical. But nudges that meet the “do good” criterion will, a fortiori, meet the “no harm” criterion too. Again, the criterion recommended here is intended to account for intuitively ethical nudges that the “do good” criterion excludes. In the remainder of this article, I propose three types of such nudges.

APPLYING THE CRITERIA: EXAMPLES OF “NO HARM” NUDGES

A “no harm” nudge is one that does not increase nudgees’ welfare but does not harm them either: it makes the nudgee neither better off nor worse off. There are at least three types of “no harm” nudges, which I will refer to as: (1) Choice Architect nudges, (2) Third Party nudges, and (3) “Meh” nudges. Here I explain more about each type and offer some examples.

The “no harm” criterion is the lowest bar that a nudge must meet in order to be ethical.
Choice Architect Nudges

These nudges are intended to make the choice architect better off. They aim to increase the welfare of the choice architect while not significantly affecting the welfare of the nudgee.

1. Please Offer Me a Seat

Transport for London, the UK government agency that supervises public transportation in the nation’s capital, designed “Please offer me a seat” badges to make traveling easier for people with a range of conditions that make it difficult for them to stand. Free to users on request, without the need to disclose any medical history in the application, the badges nudge seated commuters (nudgees) to give up their seats to badge wearers (choice architects). “Please offer me a seat” badges are a Choice Architect nudge because the person benefiting is the one doing the nudging, as wearing the badge not only increases their chances of obtaining a seat, but is also intended to reduce the discomfort associated with asking strangers to give up their seats. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees not to give up their seat if they choose not to do so, and (2) because nudgees are not significantly harmed by the nudge, since giving up their seat and standing up is not difficult for them.

FIGURES 1–7: Singapore’s Land Transport Authority has followed Transport for London’s lead and implemented their own “May I have a seat please?” initiative, which includes a sticker for people with short-term conditions (such as those on a one-day medical leave), as well as lanyards and cards for those with long-term conditions. Photos: Land Transport Authority, Singapore. Reprinted by permission.
2. **Antitheft Lunch Bags**

This nudge consists of a transparent resealable plastic bag designed with irregular green spots on both sides, to make freshly prepared food look as though it has gone moldy. Users of these bags (choice architects) nudge would-be lunch thieves (nudgees) away from stealing their food. Antitheft lunch bags are a Choice Architect nudge because the beneficiaries are the bag users, who get to keep their lunch. This nudge meets the “no harm” criterion’s conditions (1) because it would be easy for nudgees to steal the food anyway, and (2) because nudgees are not harmed or made worse off by not stealing the bag user’s lunch.

3. **Tip Jars**

People are more prone to tip when the act of tipping is perceived as a social norm. This is due to what is called social proofing: a type of conformity whereby people copy what they perceive to be other people’s actions. Clear, half-filled jars placed on the counter at a coffee shop, for example, send the message that tipping is the normal and common thing to do, thereby nudging customers (nudgees) to tip their baristas (choice architects). Some coffee shops go even further by setting up “dueling jars” to increase tipping: in this scenario, two jars with competing alternatives (e.g. cats vs. dogs, Batman vs. Superman, chocolate vs. vanilla, etc.) are placed next to each other so that people can express their preference, “voting” for their favorite option by placing a tip in one or the other jar. Tip jars are a Choice Architect nudge because the baristas are the ones who benefit by getting more tips. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees not to tip if they choose not to do so, and (2) because nudgees are not significantly harmed by tipping, as the financial impact is minimal.

4. **Interactive Donation Boxes**

A familiar example of this nudge is the “coin vortex” donation boxes often found in science museums. Compared to plain standard donation boxes, interactive ones that “gamify” the donation experience are more engaging, which nudges visitors (nudgees) to support charities and museums (choice architects). Interactive donation boxes are a Choice Architect nudge because the one benefitting is the charity, museum, or other organization that owns the box. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees to ignore the box and not donate, and (2) because nudgees who donate are not significantly harmed by the modest donations of pocket change that the boxes solicit.
FIGURES 8–9: Example of donation boxes. Photos: Donation Boxes.co.uk Limited.
Reprinted by permission.
Third Party Nudges
These nudges are intended to make a third party—i.e. neither the choice architect nor the nudgee—better off while not significantly affecting the welfare of the nudgee or the choice architect.

1. Reserved Seats
Singapore’s Land Transport Authority introduced striking reserved seat designs on their trains to signal clearly what seats are intended for commuters with special mobility needs. The colorful designs, which incorporate phrases like “Show you care” and “Be good” make reserved seats look different from the other seats, which in turn nudges passengers who don’t need them to be more conscious and think twice before taking those seats. Eye-catching reserved seats are a Third Party nudge because the people benefitting are neither the choice architect (the Transport Authority) nor the nudgees (passengers who choose not to occupy the reserved seat), but the people who get to sit on them. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees to sit on the reserved seats anyway, and (2) because nudgees are not significantly harmed by not occupying the seats, as standing is not a challenge for them.

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2. **Donations**

Legacies are an important source of income for charities. In England, however, while 35% of people indicate a willingness to leave a donation in their will, only 6.3% of people actually do so. With this fact in mind, the UK’s Behavioural Insights Team, a social purpose organization focused on public-sector nudge development, conducted a series of randomized trials involving social norms, which were invoked as triggers to nudge people into leaving money for charity in their wills. The social norm-based strategy consisted in reminding people that many others leave charitable legacies, followed by asking the people if they would like to do the same. The organization found that first-time will writers went on to donate roughly 40% more in the social norm condition than in the control condition. Legacy donations triggered by social norms are a Third Party nudge because the entity benefiting is neither the choice architect (solicitor) nor the nudgee (will writer), but the charity that receives the legacy donation. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees to decline leaving money to charity, and (2) because nudgees are not significantly harmed by donating, as they will no longer be alive for the consequences of this nudge to affect them in any way.

3. **System Defaults at Hospitals**

Generic medications are less expensive and just as effective as name-brand medications. However, many physicians tend to prescribe name-brand medications as a matter of course. Penn Medicine’s Nudge Unit, a behavioral design team embedded within the University of Pennsylvania’s academic medical center, changed the display defaults in the data system used by the center’s physicians, so that generic medications would appear before name-brand medications in the system’s dropdown menus. This change to the system immediately increased generic medication prescription rates from around 75% to 98.4%. This nudge is a Third Party nudge because the people benefitting are neither the choice architect (the Nudge Unit) nor the nudgee (physician), but the patients who save money on medications. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees to disregard the default and select a brand-name medication from the dropdown menu instead, and (2) because nudgees are not harmed in any way, as the outcome of the nudge impacts the patients’ personal finances, not the physicians’ finances.

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23 The Behavioural Insights Team, “Legacy Giving and Behavioural Insights.”

24 Another third party, donation-related nudge is the “rounding up” technique used by some retailers and restaurants to nudge clients to donate to a good cause. This nudge involves cashiers, during checkout, inviting customers to increase their bills to the next round number and donate the difference. Here, the cashier is the choice architect, and the customer is the nudgee; the entity benefitted from the nudge is the charity that receives the donations. For more on the psychology behind this nudge, see Katie Kelting, Stefanie Robinson, and Richard J. Lutz, “Would You Like to Round Up and Donate the Difference? Roundup Requests Reduce the Perceived Pain of Donating,” Journal of Consumer Psychology, 29, no. 1 (2018): 70–78.


26 The Nudge Unit at Penn Medicine has also used default options to decrease the duration of opioid prescriptions—another Third Party nudge. See nudgeunit.upenn.edu/projects/using-default-options-decrease-opioid-prescribing-durations.
4. We are Watching You

A team from Newcastle University in England tested the theory that people tend to behave better when they believe they are being watched. The team was able to show that signs featuring watching eyes and including the message “Cycle thieves, we are watching you” nudge would-be bicycle thieves not to steal from locations where the signs are placed. Bicycle thefts decreased by 62% in the areas of campus were the signs were located.27 “We are watching you” signs are a Third Party nudge because the person benefitting is neither the choice architect (Newcastle University, in this case)28 nor the nudgee (potential bicycle thief), but bike owners, as they avoid having their bikes stolen. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees to ignore the signs and steal anyway, and (2) because nudges who are deterred from stealing are not harmed by the nudge.29


28 This nudge has also been implemented by the Heathrow Airport Police, in association with the UK’s national bicycle database, BikeRegister: twitter.com/mpsheathrow/status/1238127347758497795.

29 One may think that this nudge actually makes the nudgees better off because by not stealing, they avoid the potential punishments that might otherwise result. However, this does not appear to be the case. The study concluded that the signs led to a displacement, as opposed to an absolute reduction, of the offending behavior: bicycle thefts increased in control locations in almost equal proportion to the decrease in experimental locations, suggesting that the nudge effectively deters nudgees from stealing only in a particular location, not from stealing altogether.

FIGURE 11: A BikeRegister warning sign at Heathrow Airport. Source: Heathrow’s Aviation Policing Twitter account; photo modified by Valerie Joly Chock. Reprinted by permission.
So far, I have proposed two types of “no harm” nudges: Choice Architect nudges and Third Party nudges. There is an additional class of nudge that exists as a combination of these two. Nudges intended to make both the choice architect and a third party better off while not significantly affecting the welfare of the nudgee are also ethical under my proposed “no harm” criterion. As an example, we have another bike-related nudge:

5. Bicycle Boxes

When “handle with care” and “fragile” package labels were not enough to induce their shipping partners to take proper care of their products during transit, the Dutch electric bicycle company VanMoof came up with an imaginative solution: printing images of flatscreen TVs on their boxes. This clever packaging design led to 70–80% fewer bicycles arriving to their destinations with damage, thanks to the fact that handlers tend to be a lot more careful with electronic items like TVs than they are with bikes. The package redesign benefits both the choice architect (VanMoof) and a third party (new bike owner). It makes the former better off by reducing their delivery damage rate along with the corresponding expenses for returns, replacements, and refunds. It makes the latter better off by increasing the chances that they will receive a product in perfect condition. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees to keep mishandling the packages if they choose to, and (2) because nudgees are not harmed by the package redesign, as the new box does not make handling logistics any more complicated or expensive.

**FIGURE 12:** VanMoof’s shipping box. Source: VanMoof company blog post. Reprinted by permission.
“Meh” nudges
Finally, there are some nudges that are not intended to have any significant impact, good or bad, on the welfare of choice architects, nudgees, or third parties. No one is made better off or worse off than they were before the nudge.

1. Ringtones
Cellphone manufacturers set a default ringtone in all the phones they produce. As defaults, these ringtones nudge people to stick with them, even though users are allowed to change them if they want to personalize their phones. Ringtone defaults are “Meh” nudges because neither the choice architect (cellphone manufacturer) nor the nudgee (user) end up better off or worse off as a result of the nudge. This nudge meets the “no harm” criterion’s conditions (1) because it is easy for nudgees to change their ringtones if they choose to, and (2) because nudgees are not harmed by sticking with the defaults provided by manufacturers.

2. Store Layouts and Displays
Suppose that the interior of a clothing store is designed so that the shirts are located near the entrance, the pants are in the middle of the store, and the shoe section is in the back, along with the checkout counter. This layout nudges customers to explore the store in that order: shirts first, pants second, and shoes last. Store layout nudges like this one are “Meh” nudges as long as the overall layout has no significant impact on the store’s revenues or profits, because neither the choice architect (store) nor the nudgees (customers) end up better off or worse off as a result of the layout. This nudge meets the “no harm” criterion’s conditions (1) because nudges are free to disregard the store layout and explore the store in any order they want, and (2) the nudgees are not harmed by exploring the store following its layout, regardless of what items are at the front, middle, and back of the store.

All the instances of “no harm” nudges described in this section would be considered unethical according to Thaler and Sunstein’s “do good” criterion, because they are not aimed at increasing nudgees’ welfare, and thus fail to meet Thaler and Sunstein’s proposed condition (2). However, they are permissible under the “no harm” criterion proposed in this article because they do not harm nudgees, and therefore meet my proposed alternative condition (2).
CONCLUSION

Recent findings in behavioral science are of particular interest for designers, since those findings show that the way options are organized, framed, or presented—one of the main responsibilities of designers—influences people’s choices and behaviors. The scientific findings reveal the great power that designers have in their role as choice architects. But as the saying goes, with great power comes great responsibility. Designers must be empathetic toward the users for whom they are designing, and aware of how everything they design has the potential to nudge people’s choices and behaviors. Anyone using persuasive strategies such as nudging must understand that implementing nudges in their design practice can have great consequences, and that it is imperative to design and implement nudges in a way that is ethical.

In this article, I have argued that any standard which aims to categorize nudges from an ethical standpoint, offering a complete accounting of these interventions in accordance with broadly accepted ethical norms, must include nudges that do not harm nudgees, but do not necessarily make them better off, either. For this purpose, I have proposed a criterion for the ethical use of nudges that coexists with Thaler and Sunstein’s “do good” criterion, but that greatly expands the domain for the ethical application of nudges. My “no harm” criterion states that for a nudge to be ethical, it must meet these two conditions: (1) the nudge must be easy to resist, and (2) it must cause no significant harm for the nudgee. I have argued that “no harm” nudging is the minimum threshold that a nudge strategy must clear in order to be ethical. As an alternative to Thaler and Sunstein’s “do good” nudging, lowering the bar in the way proposed here allows for nudges that are both intuitively permissible and broadly accepted to be implemented in practice. In this article, I have offered examples of three types of such nudges: Choice Architect nudges, Third Party nudges, and “Meh” nudges.