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## Title: Pre-authorization: A novel decision-making heuristic that may promote autonomy

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While the nature of autonomy has been debated for centuries, recent scholarship has been re-examining our conception(s) of autonomy in light of findings from the behavioral, cognitive, and neural sciences (Felsen and Reiner 2011; Blumenthal-Barby 2016). Blumenthal-Barby's target article provides us with a timely and helpful framework for thinking about this issue in a systematic way, specifically in relation to the wide range of cognitive biases and heuristics that we employ in our decision making. Building on this, we wish to expand the framework beyond the article's focus on the *threat* posed by biases and heuristics by suggesting that it is possible for at least some heuristics to *promote* autonomy. We hope to demonstrate this point by introducing the conceptual framework for a novel heuristic that we call *pre-authorization*.

Blumenthal-Barby argues that biases and heuristics “pose a serious threat to autonomous decision-making and human agency” and that, consequently, efforts should be made to remove, mitigate, or counter them. While recognizing the autonomy-threatening potential of these ‘fast thinking’ mechanisms, as well as agreeing with the author about the types of cases in which this potential is likely to be actualized, we suggest that it does not capture the full range of interactions that are relevant to a balanced assessment of their impact on autonomy. If, as is widely acknowledged, at least some heuristics are adaptive responses to particular real-world decision-making situations (Gigerenzer 2008), the issue at hand becomes elucidating whether, and under what conditions, the cognitive influence of any particular heuristic is autonomy-threatening, autonomy-preserving, or even autonomy-promoting. Blumenthal-Barby focuses on the first of these categories; and, with respect to *the component of absence of controlling or alienating influence*, she contends that if the person's attitude towards the influence is one of feeling controlled or alienated from her decision on account of the workings of a cognitive bias or heuristic, her autonomy is diminished.

We agree with Blumenthal-Barby's recognition that “the relevant question for judgements of autonomous action is *the person's attitude towards the influence* that is leading them towards one decision or action or another” (emphasis added). But what does it mean to have an attitude towards an influence? When an influence is entirely alienating or controlling, one can reasonably adopt an attitude of rejection, lest one's decisions be influenced unduly by forces that we deem inappropriate. But in navigating our lives, we sometimes welcome certain influences, and under those circumstances there seems to be little threat to meaningful autonomy. So what is different about the influence that is welcomed from the one that is resisted? We suggest one solution: that the extent to which the source of an influence is *pre-authorized* critically determines how it affects autonomy. We have been studying this idea within the context of investigating the welcome or unwelcome nature of socio-relational influences upon people's attitudes about autonomy, but it also has implications for thinking about the effects of cognitive biases and heuristics on autonomy more generally.

We understand pre-authorization as an *evaluative stance* by which an individual gives a certain agent preferential access to influencing her decision-making processes. Commonly, pre-authorization occurs *before* a specific decision is made, and usually for decisions about which certain values, convictions, or viewpoints of the pre-authorized agent are relevant, although it can also occur contemporaneously. This evaluative stance arises on account of the fact that the individual perceives the agent as sharing the same or very similar values, commitments, and goals as those which they hold, or the agent is thought to have specific knowledge or expertise that the individual is willing to trust, given previous direct or indirect interactions. As a result, the individual feels comfortable incorporating the influence of the agent into her decision-making processes. We propose that pre-authorization is a decision-making heuristic: a shortcut that generally improves decision outcomes with minimal cognitive load. The core claim is that pre-authorization allows us to capture the importance of interpersonal relations for autonomy by explaining why certain external influences, which individualistic accounts would take to be threats to a person's autonomy, may not only be autonomy-preserving but potentially even autonomy-promoting.

A filter analogy provides a helpful way of thinking about the concept of pre-authorization. We start with the plausible claim that all information arrives with a pedigree of sorts, and it is our attitude towards the pedigree that determines the stringency with which we allow it to have influence over our decision-making processes. When the information comes from a pre-authorized source, the skeptical filter that one applies to the influence is lessened, making it easier for that information to influence the decision at hand (*contra* information from agents who are not pre-authorized). Thus, an important part of what it means to be an autonomous individual is to create and maintain such a filter for external influences, specified by a complex interworking of one's goals, values, desires, convictions, and life plan. When the filter functions properly (i.e., as in the case of an idealized, fully autonomous agent), it would: (i) apply a lower level of scrutiny to certain external influences that are 'tagged' as pre-authorized; (ii) capture and reflectively interrogate other external influences, and reflect upon them with respect to potential endorsement or internalization; and (iii) capture and reject, without the need for any (extensive) conscious reflective engagement, those influences marked by a negative tag. Indeed, utilizing such a filter is likely to be fundamental to *properly* incorporating new information into our worldview (Niker et al. 2016). The existence of such filters is supported by empirical evidence that people use more stringent criteria to evaluate others' arguments than when they produce arguments themselves (Trousche et al. 2015), and is consistent with neurobiological descriptions of decision making that account for the incorporation of external influences (Bode et al. 2014; Felsen and Reiner 2015).

The concept of pre-authorization aligns with key insights from the literature on *relational autonomy*, which have increasingly been integrated into mainstream accounts of autonomy in recent years (e.g., Christman 2009). These types of accounts, which Beever and Morar call "Autonomy 2.0", advance a new conception of individuality, one that "highlights the important social aspects of individuality and the ways in which social vectors determine, motivate, and cause or in part constitute an individual's sense of autonomy and sense of agency" (Beever and Morar 2016: p.38). Of course, conceiving of the relational nature of autonomy complicates the conditions that must be satisfied for a decision to be considered autonomous, *contra* the more individualistic "Autonomy 1.0" accounts. Rather than relying solely upon oneself, the relationally autonomous individual is socially inclusive, admitting the views of others into her decision-making repertoire. But it is evident that all views are not treated equally, and the challenge comes in distinguishing between influences that are welcome and those that are not. As Friedman contends, "Representing these two sorts of effects with roughly accurate proportionality is, however, a formidable project [since] matters of degree are notoriously difficult to specify philosophically" (Friedman 2003: p.95). We suggest that pre-authorization offers one means by which to conceive of how relational accounts of autonomy might work mechanistically – which is currently under-examined in the philosophical literature.

A pertinent consideration that follows from the concept of pre-authorization is that particular cognitive biases and heuristics could *themselves* be pre-authorized by an individual to influence her decision-making processes. This raises an interesting question for Blumenthal-Barby's account: if pre-authorized, could an otherwise autonomy-threatening bias or heuristic be seen to promote the individual's autonomy? We agree with Blumenthal-Barby's contention that people may feel alienated "upon learning that their decision-making process was infiltrated by some of these biases and heuristics"; however, we suggest that people could also respond to this information by pre-authorizing their role in future 'fast and frugal' decision-making processes.

Conceptualized as such, pre-authorized influences might not be experienced by people as autonomy-threatening, but rather just a normal part of how they navigate the complex modern world as socially embedded persons, for whom particular kinds of relations (as well as certain cognitive shortcuts) can be supportive of their autonomy. This is, of course, "ultimately an empirical question", as Blumenthal-Barby says about her own contention concerning cognitive biases and heuristics as alienating influencers. We entirely agree. We have begun to collect data on people's intuitions about autonomy, in order to examine whether and how particular values, goals, and actions might count as the person's *own* even while they reflect the influence of external factors. Our empirical investigations focus upon people's attitudes towards the influence of other actors on their decision making and, specifically, the role that pre-authorization might play in modulating these attitudes. Although it is too soon to draw firm conclusions at this stage of our studies, we contend that empirical examinations of public intuitions about the fundamental tenets of autonomy can offer guidance to the ongoing conceptual and normative debates.

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