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50

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The Concept of Picking

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Abstract: Human behavior, like everything else, has causes. Most of the time, those causes can be described as *reasons*. Human beings perform actions because they have reasons for performing them. They are capable of surveying the options available and then selecting one based upon those. But invariably occasions arise in which reasons fail to single out a determinate option. Selection from within the set of remaining options cannot then be based on reasons. Instead, the agent must fall back upon a causal process unrelated to reasons. The agent "picks," but does not "choose." This paper investigates the phenomenon of picking, situating it within a broader account of rational decision-making. It specifies the circumstances under which the phenomenon (justifiably) arises. It distinguishes between picking and a variety of closely related phenomena, such as selection based upon brute desire, acting upon "hunches," and selection via formal lottery such as a coin toss. It concludes that picking and choosing require different kinds of justification. Each, however, is just as possible and just as desirable as the other under the right circumstances.

Key Words: Rational choice, picking, reasons, Ullmann-Margalit, Morgenbesser

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1. Introduction: Consider the following situation. A person must make a decision. She cannot offer any reason for making the decision one way rather than another, and yet the final decision she makes seems rational in some sense. Situations like this are easy to identify in real life. A shopper might, for example, purchase a can of soup for dinner. The can purchased, however, is one of many, all apparently identical, sitting on the same shelf. Why does the shopper select that can, rather than some other? There seems to be no real reason for this decision. In the words of a classic paper by Edna Ullmann-Margalit and Sidney Morgenbesser, the shopper "picks," but does not "choose" (Ullmann-Margalit and Morgenbesser 1977). In addition, picking is the right thing for the shopper to do; if the shopper did offer "reasons" for choosing the can on the left over the can on the right, her performance would seem peculiar, bizarre—even *irrational*.

Intuitively, then, it seems both *possible* and *rational* for an agent to pick, to select one option instead of others while lacking any reasoned basis for doing so. But this intuition has generated a great deal of theoretical controversy. To act rationally is, on most accounts, to act on the basis of reasons; rational picking therefore sounds like a contradiction in terms. In addition, it is not completely clear what it would even mean for a person to select without reasons. Surely action requires reasons; without reasons, what basis exists for determining actions? Considerations like these have led prominent philosophers throughout the ages to deny the reality of picking. Whatever the real story behind the selection of soup cans, the argument goes, we have good theoretical reasons for believing it simply can't be picking.

This paper defends the possibility and rationality of picking. It performs this task by situating the phenomenon of picking within a broader account of rational behavior. This requires specifying where picking arises in reasoned decision-making. It also requires distinguishing picking from other types of rational behavior, as well as distinguishing between different types of picking. The result is a classificatory scheme of rational decision-making types—one that is hardly complete but hopefully adequate—within which picking can find a clear place. Underlying the paper is the belief that a scheme like this can defuse the primary philosophical reservations generated by the idea of picking. Picking seems odd largely because it seems hard to square with a coherent and defensible account of reasoned decision-making. This paper seeks to rectify this problem by offering just such an account.

The account of reasoned decision-making presented in this paper should make plain how picking works, and why picking, perhaps counterintuitively, should be judged rational after all, at least under the right circumstances. This topic is of both empirical and normative interest. People *do* sometimes pick, and people *should* sometimes pick. Situating picking within a broader context makes it becomes possible to defend both of these claims.

Section 2 offers a schematic account of reasoned decision-making.¹ Section 3 shows that such decision-making may fail to recommend a unique course of action. It may, in other words, generate *indeterminacy*. These two sections generate the context within which picking becomes rational. Section 4 defines the phenomenon of picking, and shows how it may supplement rational decision-making when indeterminacy occurs. The definition offered here builds upon the seminal account of picking offered by Ullmann-Margalit and Morgenbesser. Section 5 distinguishes different types of picking.

¹ Some philosophers distinguish between *reasoned* decision-making and *rational* decision-making. See, e.g., Kolodny (2005). I make no effort to respect this distinction here.

Section 6 distinguishes picking from some processes with which it might easily be confused—processes equally important to rationality. Section 7 argues directly for the existence and the rationality of picking.

2. Reasons and Decision-Making: All decision-making processes consist of two steps.Jon Elster describes these two steps as filters.

A general theory of human action...can be sketched as follows. To explain why a person in a given situation behaves in one way rather than another, we can see his action as the result of two successive filtering processes. The first has the effect of limiting the set of abstractly possible actions to the *feasible* set, i.e. the set of actions that satisfy simultaneously a number of physical, technical, economic and politico-legal constraints. The second has the effect of singling out one member of the feasible set as the action which is to be carried out (Elster's emphasis; Elster 1984, p. 76).

In practice, it may be difficult to determine at what stage a rejected option gets filtered out. If I reject the idea of having Chinese food for dinner, is it because I consider it but discard it in favor of another option (second filter), or because I do not even include it in my list of options worth considering (first filter)? But whenever an actor acts, that actor's behavior must be determined by at least one filter of each sort (cf. Føllesdal 1982, pp. 306-307).

Both of these filtering operations may be performed well or poorly. An individual may commit either type I or type II errors in constructing the first filter, for example—filtering out options that require consideration, or failing to filter out options best excluded. The agent may thus need to take steps to make sure that both processes are

performed adequately. Moreover, this supervisory process is not infallible. The agent may fail to obtain an accurate grasp of how her own decisions are in fact made (selfdeception); or she might accurately identify failings but prove unable to correct them (weakness of will). Such failings, moreover, are also failures of rationality. This position is subject to debate, of course, but I shall not defend it further here.

A rational agent constructs these filters with reference to the *reasons* the agent has for acting one way rather than another. Those reasons provide the agent with a basis for rejecting some options in favor of others (the second filter). They also provide the agent with grounds for eliminating some options from consideration (the first filter). Whatever option survives both of these reason-based filters will be chosen for action.

This account of reasoned behavior is extremely minimal. It says nothing about what counts as good or bad reasons for action; in that sense, it is purely formal, not substantive. Moreover, it leaves open the question as to *how* reasons effect the filtration. On the standard account, a rational agent rank orders her options in accordance with the quality of the reasons behind them; she then filters out all options except the one ranked highest—the one with the "best" reasons in its favor. But this account, while standard, is not uncontroversial. Joshua Gert, for example, has argued that reasons serve two distinct purposes—they can *require* actions and they can *justify* actions not otherwise required (Gert 2003, 2007). One set of reasons might be better than another at justifying actions but not at requiring actions. On Gert's account, therefore, it is incoherent to speak of acting on the basis of the "best" reasons, because there are multiple things that reasons could be "best" at. The account offered here takes no position on this debate; all it

requires is that reasons do in some fashion filter out actions, such that the rational agent rejects the filtered and embraces the unfiltered options.

The agent's reasons thus act as a causal force in the world by determining her behavior.² This is true even if the agent is not consciously reflecting upon the reasons at the time of her decision. Whether or not such reflection takes place, if the reasons determine behavior *ex ante*, then the agent should be able to defend her decision in terms of these reasons *ex post*. Once again, the entire process, including the process of offering reasons ex post, is a fallible one. The agent may fail ex ante to identify the relevant reasons; this may involve excluding some good reasons or including some bad reasons.³ Or she may arrive at the correct set of reasons but fail to assess their quality correctly. She may also inaccurately diagnose the reasons which form the basis for her actions. That is, she may believe she acts on the basis of one set of reasons, while quite another actually does the work for her. This constitutes rationalization, not rationality. And above all, the agent may simply act in ways that she cannot rationalize. She may, for example, perform action A instead of action B, and yet be capable of recognizing both before and after the fact that the reasons favored B over A. This may be due to some visceral drive that overrides the ordinary process of conscious decision-making.⁴ The causal processes that actually determine our behavior do not always comport with any idealized picture of how our behavior ought to be determined.

 $^{^{2}}$ Some philosophers object to the idea that reasons are a type of cause. For a defense of the position taken here, see Davidson (1980).

³ Cf. Thomas Scanlon's distinction between normative reasons (the reasons the agent ought to use) and operative reasons (the reasons the agent does use). See Scanlon (1998, p. 19).

⁴ See, e.g., the distinction drawn by Jon Elster between unconscious drives and conscious desires, where the latter, but not the former, can provide reasons for action. See Elster (1983, pp. 24-25).

3. Too Few or Too Many: Ideally, a decision-maker who correctly performs these two filtering operations will be left with a single option. This may fail to happen in two ways. The two-filter process might yield too few options, or too many. It may yield zero options, or more than one.

The first case might arise if the first filter filters out all options, leaving nothing for the second filter to do. This is not as silly as it might sound; if the decision involves some vital need the agent faces—say, the need for water in the middle of the Sahara—then all options not addressing the need might properly be deemed unworthy of further consideration. (It is harder to imagine a scenario in which the second filter eliminates all options presented to it by the first filter.)

If no options survive the filtering process, then the agent will have to revisit the first filter. This may mean searching for new, previously unconsidered options that meet whatever inclusion criteria are specified (e.g., brainstorming for new ways to find water in the Sahara).⁵ Or it may involve examining previously scrutinized options more carefully, to make sure that none of them really do satisfy the inclusion criteria. Or it might mean reevaluating the inclusion criteria (e.g., suicide may at some point become a genuine alternative to continued fruitless searching for water). This must continue until the point arrives where at least one option survives the first filter; the agent is in effect caught in a (hopefully not endless) loop, continually revisiting the set of viable options and unable to proceed further until that set is non-empty.

⁵ This is, I believe, the logic behind "satisficing," whereby an agent looks for an option that is "good enough" according to some threshold (Simon 1955). Some contend that satisficing is appropriate even when there are multiple acceptable options and the available reasons clearly favor one option over others (Slote 1989). This position is hard to defend; why should anyone go for an option that is good enough when a better one is in sight? But this approach does make sense when not even a single acceptable option has yet been found.

In the second case, the agent faces a problem of *indeterminacy*. A number of options have survived the filtering process, and yet the agent can take only one. This may arise in several ways. If the reasons do in fact produce a rank ordering of the alternatives, then there may exist a set of options (surviving the first filter) such that 1) each option in the set is ranked higher than any option outside the set; and 2) each option in the set has the same ranking as every other option in the set. In this case, the agent would be *indifferent* between all options in this set; in effect, there would be a tie.

A non-standard account of reasoned decision-making yields other potential sources of indeterminacy. An agent who cannot compare the reasons for one option with the reasons for another would be unable to rank them. In such a case, the agent would face a problem of *incommensurability* (Chang, ed. 1997). Gert's distinction between the justifying and requiring roles of reason (mentioned earlier) gives rise to similar scenarios. An agent might, on Gert's account, be justified in performing either option A or option B (because of the justifying strength of the reasons for each one) but not required to perform either one (because the requiring strength of the reasons for each is insufficiently strong). In all of these scenarios, the problem is essentially the same—the agent must select from a set of options, but is unable to do so based upon the reasons for or against each of the options in this set. This is the problem of indeterminacy, no matter what the details of the account of reason-giving that may give rise to it. No account of how reasons filter out options can dismiss the possibility of multiple options remaining unfiltered.

However it arises, the agent facing indeterminacy, like the agent whose first filter has left her with zero admissible options, is unable to act without taking further steps. Those steps might be exactly the same as those in the previous case—e.g., the

7

consideration of new options. Or they might involve scrutinizing the surviving set of options more carefully, to see if there do in fact exist reasons for distinguishing one option from the others. Or they might involve reconsidering the set of reasons themselves, to see if, given the information available about each option, they do in fact point to a unique option.

An alternative means of resolving the indeterminacy would be to employ a third filter of some sort. In this case, the agent would be taking the set of options surviving the second filter and subjecting it to scrutiny in accordance with a new set of reasons of some sort. These reasons may be totally different from the reasons employed in the second filter. (Indeed, there must be some difference between them, or else the third filter would yield the same results as the second.) Assuming such a difference exists, the first filter of the second type now acts like a second filter of the first type for the new (third) filter, which now becomes the second filter of the second type. The second filter provides a set of options for the third filter to rank order, hopefully yielding a singleton outcome.

Such a procedure is in effect lexicographic. Options are to be compared using some set of reasons R, and if R filters out all but one option, then that option is to be chosen. Should more than one option survive R, then one is to resort to a second set of reasons R', and so on. This should be familiar to anyone acquainted with Rawls' conception of justice as fairness (Rawls 1999). This conception ranks one social system as more just than another if the former better secures Equal Basic Liberty than the latter. If two social systems ensure equal basic liberty equally well, then the social system that better ensures Fair Equality of Opportunity is judged more just; any indeterminacies of judgment regarding justice that remain are resolved via the Difference Principle. All of these methods of resolving indeterminacy take for granted that at the end of the day, the goal is for a single unique option to be identified, and identified on the basis of the reasons in favor of it. If this can be accomplished, then the agent will be able to give reasons as to why that option was chosen in preference to any other. But this may prove impossible. If this is the case, then the agent will have to resort to some process that identifies a unique option in ways not dependent upon reasons—what Otto Neurath called an "auxiliary motive" (Neurath 1983). One such process is picking.

4. Picking Defined: "We speak of *choosing* among alternatives," write Ullmann-Margalit and Morgenbesser,

when the act of taking (doing) one of them is determined by the differences in one's preferences over them. When preferences are completely symmetrical, where one is strictly indifferent with regard to the alternatives, we shall refer to the act of taking (doing) one of them as an act of *picking*. We adopt the term *selection* as the generic term, neutral with respect to choosing and picking (Ullmann-Margalit and Morgenbesser 1977 p. 757; all subsequent citations will be to this paper unless otherwise indicated).

Ullmann-Margalit and Morgenbesser (hereafter UMM) thus define picking, choosing, and selecting in terms of preferences, but they admit that this can just as easily be done in terms of reasons for action (pp. 767-768; cf. Rescher 1959-1960, p. 142). "Choosing is choosing for a reason," they write, "and this presupposes preference" (p. 758). Formulating the argument in terms of reasons, however, makes possible a number of distinctions that UMM neglect.

An agent is presented with the possibility of picking whenever she is in

a selection situation with the alternatives A and B such that: (i) the agent cannot select both A and B ("cannot" being construed as deontic prohibition, practical impossibility, or whatever); (ii) the agent is indifferent between A and B; (iii) the agent prefers the selection of either A or B, whichever it may be, to the selection of neither: one—or the other—is better for him than none (pp. 757-758).

In such a situation, the agent has exhausted all reasons for selecting between A and B, and thus faces a situation of indeterminacy between them. If the set of reasons is truly exhausted, then the agent may employ a third filter of a different kind, a filter entirely independent of reasons. She may decide what to do by allowing herself to select on the basis of *no* reason at all. In effect, the agent allows a causal process from within herself, ungoverned by reasons, to make the final selection. This is picking.⁶

Such a move would, of course, make little sense without some form of prior screening—i.e., without resort to properly-functioning first and second filters. One is never without reasons for distinguishing between *all* of the actions, no matter how absurd, that one could perform at a given moment. And so some form of scrutiny precedes, in non-pathological cases, all acts of picking.⁷ This scrutiny might be very intense, or it might be perfunctory, depending upon the seriousness of the decision.⁸ But

⁶ McAdam (1965) uses the term "non-rational choice" to describe the same phenomenon.

⁷ In his book *The Paradox of Choice*, Barry Schwartz distinguishes between "pickers" and "choosers." The latter make decisions via the two-filter process described above. The former simply pick from the options presented to them, without scrutinizing them or even questioning the elements composing the set (Schwartz 2005, p. 75). Clearly, Schwartz here treats picking as a pathological phenomenon; his discussion of the contrast between picking and choosing thus differs from the one provided here in critically important ways. ⁸ Cass Sunstein and Edna Ullmann-Margalit classify picking as a "low-low" decision procedure. By this they mean that it generates very low decision-making costs both in advance and on the spot (Sunstein and Ullmann-Margalit 1999, p. 13). This claim is ambiguous. If it means that the brute act of picking requires little advance preparatory work, it is clearly correct; one does not need practice in order to pick. But if it means that one never expends much energy on decisions that ultimately result in picking, then it seems unsustainable. One can pick between two options that were singled out after a long and arduous screening process. Ullmann-Margalit tacitly acknowledges this elsewhere, when she points out that picking may take place between options that are not trivial or insignificant (Ullmann-Margalit, 1985, p. 442).

once the appropriate level of scrutiny has been performed, there is nothing wrong, other things equal, with picking. After all, all surviving options have been scrutinized, and one has no good reasons for rejecting any of them. One cannot go wrong no matter how one selects. And given that there are no reasons to favor one option over another, the final selection cannot be accomplished using any form of reason. Hence the need—and the appropriateness—of a process independent of reasons, such as picking.

It may be true that an agent is equally justified in selecting any element of her set of unfiltered options once the appropriate amount of scrutiny has taken place. But it is also true that the agent is required to select from this set. "None of the above" was presumably among the options already considered and rejected as inferior to all of the options in this set. To select it would therefore be irrational.⁹ Such irrationality might well arise given the strain of the decision-making process. A shopper presented with too many brands of chicken soup at the grocery store may well go home empty-handed (Schwartz 2005). Assuming that any of these brands is better than no soup at all—and that the customer could reasonably be aware of this—the customer would be making a mistake by not picking.

One *may* pick at any time; one is *justified* in picking only if there truly are no reasons of which the agent ought to be aware for favoring one of the best options over the others. This makes an act of justified picking both internal and objective. It is internal because whether or not the act is justified depends upon the reasons available to the

⁹ This claim is defended by David Schmidtz (1995). Schmidtz further argues, however, the picking can be justified even when 1) options can be ranked in terms of their reasons and 2) there is no indifference between any two options. An immortal agent, for example, might possess a bottle of "EverBetter Wine," which forever improves with age. The agent always has better reasons for drinking the wine at time t+1 than drinking it at time t, but waiting forever means never drinking it, and so picking a time to drink it makes sense. Schmidtz's example, however, relies upon highly unrealistic assumptions (e.g., an infinite set of alternatives), and I do not see a way to preserve his argument under more realistic assumptions. I therefore leave aside this possibility aside.

agent—that is the reasons which, *ex ante*, could in some sense have determined the agent's behavior. It is objective because the reasons available to a given agent at a given time are a matter of objective fact. It could thus be the case, for example, that an agent picks because she did not perceive any reasoned basis of choice, but that this lack of perception stems from a failure to collect sufficient information. In such a case, the agent can see no reason not to pick, but she is mistaken.

UMM are ambiguous on the nature of picking here. They claim that

since choice presupposes preference, and preference relevant differences, and given that the relevance or irrelevance of the differences among alternatives varies with one's interests, what presents itself as a choosing situation to one person may be conceived of as a picking situation by another (p. 775).

If UMM mean that different people, confronting the same set of options, might have different reasons available to them, then they are correct. But it would be wrong to say that, for two agents with exactly the same access to reasons in exactly the same type of decision-making situation, one might be justified in picking while another is justified in choosing. Choosing requires effort that picking does not; therefore, expending that extra effort (collecting information, evaluating alternatives, etc.) is either justified or not.

Similarly, two decisions may be similar in most respects, but a single critical difference might imply that picking is justified in one but not the other. UMM offer the following example of this:

Selecting a rain hat in a department store, having been caught in a sudden pour, I may well be aware that there exists an optimal choice of a hat that suits me best. And yet, my overall priority being to get out of there fast—before the train leaves or before my toddler wrecks the place—I may choose to forgo all weighing and balancing and simply pick (pp. 775-776).

Clearly, time and other constraints (like difficult children) may legitimately influence the appropriateness of picking versus choosing. An agent facing such constraints could, if challenged, defend her decision to pick in ways that an agent facing the same decision, but without such constraints, could not.¹⁰ But this need not mean, as UMM conclude, that "with regard to any given selection situation you may choose—indeed you are free to choose—to allow it to be a picking situation" (p. 775). Given the reasons available to you, it will either be possible for you to defend a decision to pick in a given scenario, or it will not. (Determining which is which, however, might be very difficult.)

Recognizing the internal-yet-objective nature of picking situations makes possible important judgments regarding rationality. It implies, for example, that while one may not be able to "pick wrongly," one can pick in situations where one ought not to pick, or even vice versa. As an example of the latter phenomenon, consider the case of advertising. As UMM point out, much advertising is designed to make people perceive differences between products that simply are not there, or that are irrelevant to the selection problem (p. 782). In effect, such advertising aims to make people choose, in situations in which they ought to pick. This sort of behavior can be criticized on grounds parallel to the reasons for criticizing picking in situations in which one ought to choose. If

¹⁰ According to UMM, this implies that there may be no "picking situations proper" or "choosing situations proper" (p. 777). This is true only if one describes decision-making situations in ways that make no reference to the reasons available to the agent. (I shall argue later that one should specify "picking situations proper" in another way.) They also believe that there may be people who are (legitimately, I assume) more or less prone to pick than others (p. 780). This claim is unobjectionable, so long as the disposition an agent has to pick or choose is a function of the agent's past experience, information, etc.—in short, her access to reasons.

there are legitimate grounds for choice, one ought to rely upon them; if there are no such grounds, one should not pretend that there are.

5. Types of Picking: One can draw two distinctions within the class of decision-making problems involving indeterminacy. First, one can distinguish between problems in which there is in principle no way to reject one option in favor of another, and problems in which it is possible but undesirable to try and find such a way. Put another way, it could be that *no* reasons for distinguishing between options A and B exist; or it could be that while such reasons may exist, it would be irrational to try and find them. Decision-making, after all, incurs costs (in terms of time, energy, etc.), and those costs must be traded off against alternative uses to which they could be put. When indeterminacy arises as a result of such tradeoffs, it can fairly be described as indeterminacy "within the limit of what it pays to find out" (Elster 1989, p. 107).

UMM labels this a distinction between "picking situations proper," in which there is "genuine indifference," and "picking by default," in which information may exist to justify a choice that is both unknown and not worth pursuing (pp. 763, 765). But as the examples they provide indicate, the distinction can be very hard to draw in practice. "Supermarket shelves," they write, "supply us with paradigmatic examples of social picking situations proper" (p. 761). The choice between two cans of soup of the same size and brand is a classic example of this. And yet at the same time they admit that

there may be differences among the cans, even differences which could make a difference. Thus a scientific weighting of the contents of the cans may yield that one of them was slightly fuller, or a careful examination of the inside of one of the cans may reveal that one of them was rustier than the others, etc. The point, however, is that as far as the ordinary consumer in the ordinary shopping situation is concerned one cannot seize upon these possible differences and claim that owing to them the situation is one of *choosing*. For all that the ordinary consumer in the ordinary shopping situation can determine for himself in a rough-and-ready way the alternatives up for selection are essentially identical and so his situation vis-à-vis them is one of *picking* (pp. 761-762).

It would be counterproductive for most consumers to try and distinguish among cans, assuming that relevant distinctions exist. But that makes the selection between two cans a case of picking by default, albeit a trivial one.

If even the selection of a can of soup counts as a case of picking by default, it might appear that that the class of picking situations proper is empty. But this is not true. Consider, for example, the question of rights. Many people believe that all human beings possess a certain moral status by virtue of being human (because of their intelligence, sociability, self-consciousness—the reason is immaterial here). That moral status might imply that every human being has certain rights. If so, then there could arise cases in which an agent must honor the rights of one and only one of several individuals. In any such case, so long as the agent continues to believe that all of the individuals in question are human, there is no information she could receive that would give her reason to prefer one person over another. Any selection she made would be under indeterminacy.¹¹

It is easy to believe that cases such as the selection between soup cans are picking situations proper because for most people, the natural response to them—picking—is easy and effortless. Indeed, such cases are often deliberately *constructed* so as to generate

¹¹ This need not imply that the agent would be justified in picking between rights-bearers. I shall return to this point later.

picking in a natural way. These are what UMM call "social" picking situations, in which one agent deliberately sets up circumstances under which it would be rational for another to pick (p. 761, n. 8). This is what manufacturers do when they standardize products. They do not want consumers to be able to judge one can of soup better than another; if consumers could do this, the latter can would never get sold.¹² UMM conclude that

in this era of mass production and automated assembly lines there is an abundance of essentially identical products and consumer goods that repeatedly place every one of us in picking situations. We may choose the *type* but we often can do no better than pick the *token*, whether it be a toothpaste tube or a copy of a book, a king-size bed or a motorcar (p. 763).

One can agree with UMM that there are more cases than ever before in which picking is the natural and easy thing to do, while still rejecting their claim that this fact depends upon an increase in the number of picking situations proper.

In many cases, picking is so natural that it is difficult to distinguish between two alternative ways that individuals may confront them. Suppose, for example, that an agent enters a situation in which she is presented with two or more options—say, cans of soup—between which there are no reasonable and significant distinctions (i.e., no distinctions worth finding). The agent's first filter might produce two options—"select can A" and "select can B." When the agent discovers via her second filter that there is no distinction between these two options, she resorts to a third filter—e.g., she picks a can.

¹² In a sense, this is the opposite of the scenario described earlier in which a product vendor used advertising to induce people to choose rather than pick. The difference is that in the advertising case, the differences are often specious, whereas in the case of product standardization, the lack of difference is as real as the manufacturers can profitably ensure. Still, just as advertising sometimes conveys real information, so standardization can accommodate irrationality as well as rationality. If consumers mistakenly believe blemished fruit to be inferior to unblemished fruit, then fruit growers will sell only unblemished fruit. In this case, consumers are mistakenly choosing rather than picking, but unlike the advertising case, the vendors are not responsible for this mistake.

Alternatively, the agent's first filter might produce a single option—"select a can of soup." This would then (trivially) be the unique option yielded by the second filter. The agent then selects a can without really acknowledging that there was another decision to make. The process of selecting one can rather than another might have been made automatically, at the level of causes rather than reasons to act. But this process happens without conscious acknowledgement by the agent; picking, while also a causal process not involving reasons, is a conscious act.

The distinction between picking situations proper and situations involving picking by default is not the only distinction one can draw between picking situations. As the soup can example makes plain, there are many situations in which the reasons for picking A are *exactly the same* as the reasons for picking B. One wishes to have a dinner that is tasty, moderately nutritious, not too expensive, etc. All of these considerations provide reasons for selecting a particular can of soup; they also all provide reasons for selecting the can sitting next to it. The options are completely fungible. Call this a case of indeterminacy by *identical reasons*. This case might be very different from one involving a selection between, say, a Mexican and a Thai restaurant. The Mexican restaurant might be cheaper than the Thai restaurant, but have fewer selections and be slightly further away. Here a tradeoff between reasons is necessary across the two options, and it is in accordance with that tradeoff that the reasons would prove indeterminate. This type of indeterminacy would not arise if the would-be restaurant patron made her decision upon the basis of a single "covering" value. If she were, say, a pure hedonist, she would ignore all considerations about the two restaurants except the total amount of happiness that dinner at each place would provide. The only way that indeterminacy could then arise would be if the two promised exactly equal quantities of happiness. But if that were the case, she would have the same reasons for favoring each of them, and would be facing a case of indeterminacy by identical reasons. Without a covering value, the only way to decide is to trade off various reasons against one another. When such tradeoffs leave the selection indeterminate, the agent faces a case of indeterminacy by *balanced reasons*.¹³

This distinction matters because picking is harder to pull off when reasons are balanced than when they are identical. It is easy to see why this might be the case. When two options appear identical, it is plausible to believe that future searching either will fail to turn up differences or will turn up only trivial ones. But when two options each have different considerations in their favor, one might reasonably suppose that a little additional effort will reveal something important. Thus, people are prone to worry that when reasons are balanced, they are missing something, and that if they look harder they can correct this oversight.¹⁴ This may lead them either to expend excess effort trying to find insignificant new reasons for choosing between options; or to distort the reasons they already have so as to make one option appear better than the other. Such irrational behavior would have reason try to do more than it is capable of doing, a phenomenon Jon Elster calls "hyperrationality" (Elster 1989).¹⁵ People may be more capable of responding

¹³ In another paper, Ullmann-Margalit speaks of "small" decisions, "where one is strictly indifferent with regard to the alternatives" and "where one's preferences are completely symmetrical" (Ullmann-Margalit 1985, p. 441). If by "symmetrical," Ullmann-Margalit means preferences based upon reasons that completely balance each other out, then her point is well-taken. If, however, she means preferences based upon *identical* reasons, then she is neglecting the possibility of indifference by balanced reasons.

¹⁴ Biologically, this reaction to indifference by balanced reasons makes sense. As Barry Schwartz points out, "for most of our history as a species, the kinds of choices we had to make were 'Should I approach it or run away from it?' or 'Do I eat it or does it eat me?' The idea of multiple attractive beckoning options is something that is specific to modernity" (Schwartz 2005, p. 5).

¹⁵ The literature concerning cognitive dissonance bears out this fact. Cognitive dissonance arises from certain difficult decisions, especially "close" ones. It leads people to (among other things) distort their judgments *ex post*, so that what was originally a close call becomes an easy decision. Close decisions are less likely to lead to dissonance the more the "cognitive overlap" shared by the options. "The degree of overlap is high if many of the elements in the cluster corresponding to one alternative are identical with

appropriately to indeterminate decisions when the indeterminacy involves identical rather than balanced reasons; the appropriate response (steps to avoid hyperrationality, for example) might therefore also be different in the two cases.

Thus, when indeterminacy arises, it might be essential to the situation (picking situations proper) or else exist only because of cost constraints (picking by default). It might be due to reasons being balanced or identical. This yields a fourfold classification of decision-making situations under indeterminacy.

	Identical Reasons	Balanced Reasons
By Default	Ι	II
Proper	III	IV

Case I is the classic case in which picking is a justifiable decision-making procedure. It includes all cases involving standardized options such as soup cans. Case II generates the most anguish in those that face it; people are highly reluctant to admit to genuine indeterminacy here, and prone to collect extra information that they know might well exist. Case III requires some principled reason for believing that further scrutiny will not eliminate the indeterminacy. It is difficult to establish that situations of this sort exist, and even more difficult to establish that picking is the correct response to it. One might believe, for example, that all individuals have an equal right to serve on juries, so that there exist equal reasons for selecting all eligible citizens. But would anyone seriously believe that a jury selection officer should just pick, rather than resort to a lottery (cf. Stone 2007c)? Case IV is identical to II, except the agent somehow knows that further information will never upset the balance between competing reasons. It is even hard to imagine how such a case could ever arise in practice.

elements of the cluster corresponding to the other alternative. High cognitive overlap is generally loosely implied when we speak of two things being 'similar'" (Festinger 1957, p. 41). The critical experiment establishing this phenomenon was Brehm (1956).

6. Related Phenomena: It is important to distinguish picking from a number of similar selection processes. Picking, for example, might conceivably be described as selection based upon a "feeling" (e.g., "I feel like Thai food tonight.") But one can interpret talk of such "feelings" in at least three ways. First, the "feeling" might simply refer to whatever biological sensation accompanied the act of picking. Second, it might refer to a desire or pleasure associated with selecting one of the options. If the agent makes her selection based upon such a feeling, she is clearly choosing. The pleasurable feeling provides a reason for favoring one option over the other, and so no indeterminacy exists.¹⁶

The third possible interpretation resembles the second. The agent might believe that one of the options should be selected, but be unable to articulate reasons for this claim. If the agent selects this option, she is acting on a "judgment call," or "hunch," or "educated guess." Such an action does not involve picking; the agent genuinely believes one option worth favoring over the others, even if reasons do not enter into this belief. The agent is not "admitting defeat" when it comes to identifying a single outcome; rather, she selects one and hopes that it is right, just as she would do if she had articulable reasons for thinking so. This process is hardly a marginal phenomenon. Joseph Hutcheson and Frank Knight have pointed out the centrality of judgments of this kind to law and economics, respectively (Hutcheson 1929; Knight 2002).

UMM recognize the distinction between picking and employing judgment, albeit indirectly. Following the existentialists, they argue that many of our deepest values cannot receive rational grounding. To that extent, decisions involving such values resemble picking. As a result, "it just may be that, whether to our delight or to our

¹⁶ Other forms of choosing may potentially be confused with picking as well. If, for example, one selects between two otherwise identical options on the basis of *convenience*—one is just easier to select than the other—then a reasoned basis exists for choice. The convenient option is thus chosen, not picked (p. 771).

dismay, it is picking rather than choosing that underlies the very core of our being what we are" p. 785). In other work, Ullmann-Margalit develops this analysis further by drawing a close parallel between "small" decisions involving picking and "big" decisions involving what she calls "opting" (Ullmann-Margalit 1985, 2006).¹⁷ Whereas in small decisions, the agent does not have enough at stake to justify resolving indeterminacies, in big decisions indeterminacies may involve enormous stakes but no rational solutions. (The dilemma posed by Sartre—should one join the Resistance or stay at home to care for one's invalid mother?—is a classic example.) UMM correctly point to the similarity between opting and picking; nonetheless, the difference between them is significant. A person who opts is genuinely trying to make the best decision she can, even if she knows she cannot rationally defend the result; but a person who picks has no expectation or even hope of winding up with the superior option in the end.

There are thus three types of selection based upon "feeling," only one of which properly counts as "picking." Unfortunately, the existing literature on emotions and decision-making does not clearly distinguish between them. A number of scholars have argued that emotions are critical to decision-making whenever rational choice falls short. Ronald De Sousa, for example, contends that "When faced with two competing arguments," between which reason cannot decide, "emotion can endow one set of supporting considerations with more salience than the other. We need emotion," he concludes, "to break a tie when reason is stuck" (De Sousa 1987, p. 16). This argument does not distinguish among the various ways in which feeling can enter into such a situation. This leads him to claim that without feelings and emotions, decisions would

¹⁷ Ullmann-Margalit further distinguishes between "converting" and "drifting," which can take place in the same situations as opting. Space precludes discussing these distinctions here.

never get resolved in the face of indeterminacy. When picking (rather than judgment) is at stake, this claim is far from obvious. If it means that people always experience a positive feeling towards the option they pick, then it seems wrong; people do not feel an emotional attachment to whichever soup can they wind up buying at the grocery store. Alternatively, it could mean that people lacking emotion also lack the capacity to pick; in other words, the same parts of the brain are involved in performing both functions. This may turn out to be true,¹⁸ but it does not disprove the claim that picking and judgment based upon feeling are distinguishable phenomena.

At least two other methods of decision-making in the face of indeterminacy are worth mentioning. First, an agent may rely upon a *habit* or *rule* to make such decisions. This is not so much an alternative to picking as an instantiation of it. As UMM point out,

habit cannot be said to have supplied the agent with a *reason* for his selection (even though there may be reasons for a person to act in accordance with his habits); nor can it be incorporated; therefore, into the agent's utility assessments regarding the available alternatives. At the same time the habit can in a case of this sort be considered to have played a causal role in extricating the agent from the picking situation, and as such it may contribute to an *explanation* of his picking act (UMM's emphasis; p. 772).

The habit thus resolves the indeterminacy without providing a reason for the particular resolution at hand. Since the agent (hopefully) acknowledges both of these facts, the result is best described as a case of picking-by-habit. (Moreover, the adoption of a

¹⁸ Elster (1999, p. 297) argues strongly that at best scholars studying human emotion have established a correlation between the capacity for emotion and the ability to pick.

tiebreaking habit or rule of this sort must be arbitrary, and so constitutes a second-order act of picking.)

Finally, the agent could resort to a coin toss or other form of *lottery* to make the decision (Stone 2007b). Decision-making by lot is often conflated with picking; both, after all, involve the abandonment of reasoned choice in favor of arbitrary causation. But the distinction between them is important. Selection by lot can never substitute wholly for picking. As UMM explain, selection by lot does not so much eliminate picking as "push the problem one step back."

For suppose the picking situation comprises just two alternatives, A and B, and suppose that you have decided to toss a coin to settle the matter (and, indeed, that you have already somehow picked the coin that will be assigned the task). You will now have to match alternative A to heads (or tails) and B to tails (or heads). But this, of course, is inherently a matter of picking—so much so that it may deserve to be regarded as the picking situation *par excellence*.

"In other words," they conclude, "the very use of a random device is premised on the possibility of picking, that is on our capacity to extricate ourselves from a picking situation: the matching of each of the alternatives up for selection with some one of the possible outcomes of the device is, inherently, a matter of picking" (pp. 769-770).

The other important difference between selection by lot and picking is that the former can accomplish goals that the latter cannot. This makes sense; given that selection by lot of necessity involves picking, there would be little use for the former if the latter always worked just as well. To see that this is not the case, consider the following example. An agent must resolve an indeterminacy between options A and B. She picks A.

If A and B were each restaurants at which the agent was considering having dinner, this would be perfectly unobjectionable. But if A and B were patients, and the agent a hospital administrator charged with deciding which of them is to receive a kidney transplant, her use of picking would seem unconscionable. A coin toss, however, might be perfectly acceptable (Stone 2007c). A coin toss can sanitize the decision-making process—protecting against potentially unsavory motives the agent might display—in ways that picking cannot. It therefore provides a level of impartiality that many situations—especially situations in which *distributive justice* is at stake—demand. (For a more complete version of this argument, see Stone 2007a, 2009.)

7. Impossible or Irrational?: This paper has situated picking within a broader framework of rational choice. It has contrasted situations which may justify picking—situations involving indeterminacy of reasons—with more straightforward choice situations. It has also contrasted picking with other processes capable of resolving indeterminacy, such as tossing a coin or making a "judgment call." If this typology is at all convincing, then it has carved out a space in the theoretical universe of decision-making processes for an entity like picking. But in the real world, is this space empty? Is picking really possible? And even if it is possible, could it ever be *rational*?

Consider first the problem of existence. The previous section distinguished picking from a variety of related but distinct decision-making processes. Given this variety, one might well ask if real cases of picking even exist. Perhaps all apparent problems of indeterminacy get resolved via an act of judgment, a feeling of attachment to an option, or the like. This is highly implausible. As noted above, whenever a decision is made via coin toss, the agent must make a subdecision assigning one option to heads and the other to tails. This decision involves indeterminacy, but it is absurd to imagine its resolution depending upon the agent's emotional attachment to heads being associated with option A. It is equally absurd to imagine the agent getting a "gut feeling" that associating A with heads is the right way to go. Indeed, if ever an agent faces a picking situation proper, she does so in this situation.

This point is worth emphasizing, because for centuries philosophers have contended that decision-making in the face of true indifference was impossible. It was this conviction that has led so many philosophers to consider the problem of Buridan's Ass. This problem—attributed to Buridan, although it does not appear in this form in any of his known writings—involved a hungry animal caught an equal distance away from two equally attractive bundles of hay. Does the animal starve to death, and if not, how does it decide? Most philosophers have answered in the affirmative—tacitly denying the possibility of picking—but tried to mitigate this disturbing conclusion by dismissing such a situation as a marginal—possibly nonexistent—phenomenon. Montaigne, for example, regarded selection under indifference as a purely hypothetical problem, one that no sensible man of the world need every fear facing. And Leibniz believed that indifference between two distinct options was logically impossible; if the options were truly distinct, he argued, then *some* difference existed between them, and this difference provided a basis for choice, even if the agent herself were unaware of it.¹⁹

Against the arguments of the philosophers, UMM offer the commonsense evidence of ordinary experience. "We shall," they write, "at this point state our basic contention that there is no evidence, either conceptual or empirical, to challenge the

¹⁹ Leibniz did not explain, however, why the existence of some difference should guarantee the existence of a difference relevant to a given decision-making context. Nor did he explain why such differences should always be perceptible; he simply took it as a matter of faith. See Rescher (1959-1960, pp. 142-143).

thesis that people have the ability to pick." All efforts to explain away the existence of this ability have hitherto failed; we

do not in principle depend for our extrication from these situations on any artificial or extrinsic device, on second-order decisions or, for that matter, on the operation of the "will" as traditionally envisaged: we simply have the capacity to extricate ourselves directly from such situations; we simply have the ability to pick (p. 773).

UMM do not offer an account of how picking works in practice; they merely suggest that it may involve the ability to focus attention upon one alternative instead of others, despite the lack of reasons for doing so (p. 774). But any attempt to specify how picking works along these lines will merely flesh out a causal mechanism; it will not eliminate the status of this mechanism as dependent solely upon causes that do not constitute reasons.²⁰

It therefore seems very hard to deny that picking exists. The rationality of picking, however, is another matter. The examples of the coin toss and the soup cans seem to be examples of picking that most reasonable people should be able to endorse. How *else* should people assign options to heads and tails before tossing a coin? Does any sane individual ever rely on an alternative to picking—even a gut feeling or "hunch"—when deciding to reach for the can of soup on the left? But against this appeal to brute experience, one may appeal to logic. Is it simply incoherent to speak of picking—a process that by definition depends upon causes that are not reasons—as a part of *reasoned* decision-making?

²⁰ UMM's account seems to imply that a being with access to reasons but no non-reasoned causal processes would, in the face of genuine indeterminacy, suffer the fate of Buridan's Ass. This is the conclusion reached by Ronald de Sousa, although for some reason he believes it applies only to beings of limited information and power—to angels, not God (De Sousa 1987, pp. 14-15, 195). Such a being is sufficiently alien to our experience as to be irrelevant to human decision-making.

The objection may be framed as follows. If an agent is justified in picking when faced with an indeterminate selection between A and B, then it would seem that the agent is justified in picking A and not B. And yet justification is all about offering reasons. Does this not imply that the agent *does* act upon a reason in selecting A over B? And doesn't that contradict the entire assumption motivating the idea of picking—the assumption that there is no reason to pick A over B?

The answer is that the reason an agent has for selecting A rather than B is of a fundamentally different type when she picks A over B than when she chooses A over B. To see this, consider the sort of answer the agent might give if asked to justify her behavior. Why, one might ask her, did you select A rather than B? If the agent is choosing, her answer will look something like this: "A had set of reasons R in its favor, and B had set of reasons R' in its favor, and R is a better set of reasons than R'." But if the agent is picking, then her answer must be of the following sort: "The reasons for selecting A (R) and the reasons for selecting B (R') gave me no basis for choosing between them. But R and R' were both clearly superior to the reasons behind any other option. I therefore had to select one of them, on pain of being irrational, but had no reasoned basis for doing so. So I used a process unrelated to reasons."

The kind of justification that the agent can offer for herself thus differs when the behavior being justified is picking or choosing. In the case of choosing, the justification is entirely in terms of the reasons supporting each option. In the case of picking, the justification must of necessity refer to the process of decision-making itself—specifically the breakdown in the ordinary process of acting upon reasons that takes place when indeterminacy occurs, as well as the need to overcome this indeterminacy if the fate of

Buridan's Ass is to be avoided. The latter justification is thus of a higher-order than the former. Picking must be justified in terms of second-order reasons, whereas choosing can ordinarily be justified using first-order reasons only. It therefore makes sense to say that under the right circumstances, an agent can (and ought to) choose to pick; it is important, however, to remember that in this case, the picking is a first-order decision while the choosing is a second-order decision. The reasons come into play only at the latter, not the former, level.

Picking is a troublesome concept. On the one hand, it is hard to identify, and easily confused with related phenomena. On the other hand, justifying its use requires a more complicated defense than other types of decisions. And yet it is hard to argue either that picking is nonexistent or that it is unjustifiable. The ever-popular example of selecting a can of soup is sufficient (except perhaps for a philosopher) to refute both claims. Any general theory of human decision-making—any account of how people decide and how they ought to decide—must therefore find a place for picking. Philosophers have tried to avoid this conclusion, in effect sweeping picking under the rug. As UMM first demonstrated thirty years ago, this avoidance is unnecessary and undesirable. For students of human rationality, there are good reasons to choose—not pick—to study picking.

Bibliography

Brehm, Jack W. "Postdecision Changes in the Desirability of Alternatives." *Journal of Abnormal and Social Psychology* 52, no. 3 (May 1956): 384-389.

Chang, Ruth, ed. *Incommensurability, Incomparability, and Practical Reason*. Cambridge, MA: Harvard University Press, 1997.

Davidson, Donald. "Actions, Reasons, and Causes." In *Essays on Actions & Events*. Oxford: Clarendon Press, 1980.

De Sousa, Ronald. The Rationality of Emotion. Cambridge, MA: MIT Press, 1987.

Elster, Jon. Sour Grapes. New York: Cambridge University Press, 1983.

Elster, Jon. *Ulysses and the Sirens*. Rev. ed. New York: Cambridge University Press, 1984.

Elster, Jon. Solomonic Judgments. New York: Cambridge University Press, 1989.

Elster, Jon. *Alchemies of the Mind: Rationality and the Emotions*. New York: Cambridge University Press, 1999.

Festinger, Leon. A Theory of Cognitive Dissonance. Stanford, CA: Stanford University Press, 1957.

Føllesdal, Dagfinn. "The Status of Rationality Assumptions in Interpretation and in the Explanation of Action." *Dialectica* 36:4 (1982): 301-316.

Gert, Joshua. "Requiring and Justifying: Two Dimensions of Normative Strength." *Erkenntnis* 59 (2003): 5-36.

Gert, Joshua. "Normative Strength and the Balance of Reasons." *Philosophical Review* 116, no. 4 (2007): 533-562.

Hutcheson, Joseph C. "The Judgment Intuitive: The Function of the 'Hunch' in Judicial Decision." Cornell Law Quarterly 14, no. 3 (April 1929): 274-288.

Knight, Frank H. Risk, Uncertainty and Profit. Washington: Beard Books, 2002.

Kolodny, Niko. "Why Be Rational?" Mind 114, no. 455 (July 2005): 509-563.

McAdam, James I. "Choosing Flippantly or Non-Rational Choice." *Analysis* 25 Supp. (January 1965): 132-136.

Neurath, Otto. "The Lost Wanderers of Descartes and the Auxiliary Motive." In *Philosophical Papers 1913-1946*. Boston: D. Reidel Publishing, 1983.

Rawls, John. A Theory of Justice. Rev. ed. Cambridge, MA: Belknap Press, 1999.

Rescher, Nicholas. "Choice without Preference." Kant-Studien 51 (1959-1960): 142-175.

Scanlon, T.M. What We Owe to Each Other. Cambridge, MA: Belknap Press, 1998.

Schmidtz, David. *Rational Choice and Moral Agency*. Princeton, NJ: Princeton University Press, 1995.

Schwartz, Barry. The Paradox of Choice: Why More Is Less. New York: Ecco, 2005.

Simon, Herbert. "A Behavioral Model of Rational Choice." *Quarterly Journal of Economics* 69, no. 1 (February 1955): 99-118.

Slote, Michael A. *Beyond Optimizing: A Study of Rational Choice*. Cambridge, MA: Harvard University Press, 1989.

Stone, Peter. "Why Lotteries Are Just." *Journal of Political Philosophy* 15, no. 3 (September 2007a): 276-295.

Stone, Peter. "Conceptualizing Lotteries." Working Paper No. 16, Political Concepts: A Working Paper Series of the Committee on Concepts and Methods, International Political Science Association, September 2007b.

Stone, Peter. "Justice, Rationality, and Indeterminacy." Unpublished Manuscript. Stanford University, 2007c.

Stone, Peter. "The Logic of Random Selection." *Political Theory* 37, no. 3 (2009): 375-397.

Sunstein, Cass R. and Ullmann-Margalit, Edna. "Second-Order Decisions." *Ethics* 110 (October 1999): 5-31.

Ullmann-Margalit, Edna. "Opting: The Case of 'Big' Decisions." Jahrbuch of the Wissenschaftskolleg zu Berlin (1985): 441-454.

Ullmann-Margalit, Edna. "Big Decisions: Opting, Converting, Drifting." In Anthony O'Hear, ed. *Political Philosophy*. New York: Cambridge University Press, 2006.

Ullmann-Margalit, Edna and Morgenbesser, Sidney. "Picking and Choosing." *Social Research* 44 (1977): 757-85.