WHAT YOU CAN'T EXPECT WHEN YOU'RE EXPECTING*

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Abstract: It seems natural to choose whether to have a child by reflecting on what it would be like to actually have a child. I argue that this natural approach fails. If you choose to become a parent, and your choice is based on projections about what you think it would be like for you to have a child, your choice is not rational. If you choose to remain childless, and your choice is based upon projections about what you think it would be like for you to have a child, your choice is not rational. This suggests we should reject our ordinary conception of how to make this life-changing decision, and raises general questions about how to rationally approach important life choices.

It seems natural to choose whether to have a child by reflecting on what it would be like to have one. I argue that choosing on this basis is not rational, raising general questions about our ordinary conception of how to make this life-changing decision.[1]

1 Deciding Whether to Start a Family

Scenario: You have no children. However, you have reached a point in your life when you are personally, financially and physically able to have a child.[2] You sit down and think about whether you want to have a child of your very own. You discuss it with your partner and contemplate your options, carefully reflecting on the choice by assessing what you think it would be like for you to have a child of your very own and comparing this to what you think it would be like to remain childless. After careful consideration, you choose one of these options:

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* This paper is dedicated, with much love, to my two children.

[1] My point has larger consequences for how we plan our futures and attempt to become the kind of person we think we want to be. I develop the discussion and show how my argument applies to a wide range of decisions and life experiences in Paul (2014).

[2] In this example, I am assuming that you and your partner are physically able to have a child. Below, I will consider an implication of my argument for those who cannot physically produce a child. For simplicity, I am not discussing the decision to adopt a child, although I believe that a version of my argument would apply.

> *For*: You decide to have a child.
> *Against*: You decide to remain childless.

The way you went about making your choice seems perfectly apt. It follows the cultural norms of our society, where couples are encouraged to think carefully and clearly about what they want before deciding that they want to start a family. Many prospective parents decide to have a baby because they have a deep desire to have children based on the (perhaps inarticulate) sense that having a child will help them to live a fuller, happier, and somehow more complete life.[3] While many people recognize that an individual's choice to have a child has important external implications, the decision is thought to necessarily involve an intimate, personal component, and so it is a decision that is best made from the personal standpoints of prospective parents.[4] Guides for prospective parents often suggest that people ask themselves if having a baby will enhance an already happy life, and encourage prospective parents to reflect on, for example, how they see themselves in five and ten years' time, whether they feel ready to care for and nurture the human being they've created, whether they think they'd be a happy and content mother (or father), whether having a baby of their own would make life more meaningful, whether they are ready for the tradeoffs that come with being a parent, whether they desire to continue with their current career plans or other personal projects, and so on.[5]

This assessment of one's prospects and plans for the future is a culturally important part of the procedure that one is supposed to undergo before attempting to become pregnant. Since (in the usual case) the parents assume primary responsibility for the child they create, it seems appropriate to frame the decision in terms of making a personal choice, one that carefully weighs the value of one's future experiences.[6] People often frame the decision this way when they make this choice, and more importantly for my purpose here, we are (culturally speaking) supposed to frame the decision this way. Given the magnitude of the responsibilities we are

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[3] This may or may not be the same as increasing one's "life satisfaction" or "meaningfulness." I will return to this at the end of the paper.

[4] I am ignoring external, nonphenomenal factors one might weigh when making a choice about whether to procreate, such as the values of environmental impact or population control. A version of my argument that takes these factors into account holds unless these values are supposed to swamp the personal phenomenal values.

[5] Sixty seconds of googling will turn up plenty of examples. Claims like "You long to nurture and raise a little person who will likely be similar to you but still completely unique. Perhaps, you and your spouse feel like something is still missing, and a baby would complete your vision of family" (http://newlyweds.about.com/od/havingababy/tp/Reasons-to-Have-Kids.htm). Or see Caplan (2011). A different kind of example is provided by initiatives that try to convince young teens that they are not ready to become parents by giving them baby dolls to care for that need constant attention, wake up three times a night, etc.

[6] The importance of this sort of reflective approach is underscored by the general cultural prescription against unplanned pregnancies and in the attention given to family planning by many social and religious organizations.

considering taking on, we are *supposed* to think carefully about the personal implications of the choice. Many choose to have a child. Many prefer to remain childless.

2 Decision Theory: A Normative Model

When we make a choice to do something, we make a decision: we consider various things we might do and then choose to do one of them, and decision theory provides the best account of rational decision-making. Ideal agents in ideal circumstances make choices rationally by conforming to the models of an idealized decision theory. To make a choice rationally, we first determine the possible outcomes of each act we might perform. After we have the space of possible outcomes, we determine the value (or utility) of each outcome, and determine the probability of each outcome's occurring given the performance of the act. We then calculate the expected value of each outcome by multiplying the value of the outcome by its probability, and choose to perform the act with the outcome or outcomes with the highest overall expected value.

Now, decisions made by real agents in real-world circumstances do not conform to this standard model. Ordinary reasoners may be imperfect reasoners; their reasoning may only imperfectly conform to the way an ideal rational being would reason, and their assessments of the values of the outcomes may only imperfectly conform to their actual values. A more realistic version of a decision-theoretic approach, that is, what I'll call a *normative* decision theory, can capture norms for ordinary successful reasoning. If we can glean approximate values for our outcomes and apply the right decision theoretic rules, we can conform to the ordinary standard for rational decision-making. Decisions made by ordinary people can be rational if they conform to the realistic standards set by a normative decision theory, where such standards make allowances for a certain amount of approximation, ignorance, uncertainty, and mistaken beliefs.[7]

For example, when considering an outcome, perhaps we can do no better than glean its approximate expected value. After all, it is probably impossible for a person to calculate the expected value of each outcome with precision. And perhaps we do not know about all the possible outcomes. But we can approximate a rational choice by choosing between approximate expected values of the relevant or the most important outcomes. A normative decision theory describes the range and combination of rules and standards that agents must meet for their decisions to be rational, normatively speaking. It thus provides a *normative model* that real agents can

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[7] For simplicity, I am assuming a 'realist' interpretation of decision theory according to which the utility of outcomes corresponds to a real psychological quantity, such as the individual's strength of preference for outcomes or her perception of how good each outcome is. (I am indebted to Lara Buchak here.)

conform to so that their decisions are rational by our lights.[8] In this paper, I will assume that we want to meet the standard for normative rationality when we make the decision of whether or not to have a child.

In any non-ideal case, complicating features may be present. For example, sometimes outcomes have equal expected values. Then no unique act is the rational one to choose. Sometimes expected values are metaphysically indeterminate. Then it is metaphysically indeterminate which act is the rational one to choose. Or perhaps we cannot adequately partition the space of possible outcomes. Etc. For simplicity, I assume that such features are not present in *Scenario*. In particular, I assume that we can partition the space of relevant possibilities into a set of suitably fine-grained, exclusive and exhaustive propositions describing each relevant outcome.

In *Scenario*, the acts in question are either having one's own child or not having one's own child. The decision is the choice between whether to have a child or whether to remain childless. The outcomes of either act are its effects, which have dramatic emotional, mental and physical consequences. The dramatic effects follow the act of not having a child as much the act of having one: for example, not having a child means that you'll have very different experiences from ones you'd have had if you had a child, and has follow-on effects, such as the fact that you'd have significantly fewer financial costs for at least eighteen years following the date from when the omission can be said to "obtain."

The primary concern in *Scenario* is with the value of the outcome "for the agent," where this describes the value of the outcome brought about by the agent, centering on the outcome that involves the agent's perspective or point of view, that is, on the subjective value of what it is like to be the person who made the choice. In particular, the agent in *Scenario* is concerned with phenomenal outcomes that involve what it's like for her to have her own child. Since what it is like to be the agent includes what it is like to have her beliefs, desires, emotions, dispositions, and to perform subsequent acts, in *Scenario* the relevant outcomes include what it is like to have these additional effects and their attendant consequences as part of what it is like for her to have her child.

When choosing between *For* or *Against*, you compare the overall expected values of the outcomes of each act. Since we are concerned here with

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[8] Not just anything goes. After all, the madman in the asylum can reason in accordance with his mad beliefs and come to the "right" decision given the beliefs he started with. But his decision to follow the voices in his head and attack his fellow inmates does not conform to what we would ordinarily describe as rational behavior. The madness of his starting point—his mad beliefs—and hence the mad values he assigns to the outcomes of his choices, violate our ordinary standard. As Weirich (2004, 21) points out, "an agent who maximizes utility may fall seriously short of other standards of rational action. For instance, an agent's utility assignment may be mistaken. Then, he may act irrationally even though he maximizes utility." We can allow that an agent may rationally make a merely approximately correct utility assignment and thus act approximately rationally. The point is that the madman's original utility assignments are not rationally acceptable.

ordinary decision-making, we use a normative model to guide our choice, allowing for approximation and estimation in place of perfect precision. To choose rationally, given our normative model, you determine the approximate value of each relevant outcome, you determine the approximate probability of each of these outcomes actually obtaining, and then use this information to estimate the expected value of each act. After estimating the expected value of each act, you choose the act that brings about the outcome with the highest estimated expected value.

In the case where you have a child, the relevant outcomes are phenomenal outcomes concerning what it is like for you to have your child, including what it is like to have the beliefs, desires, emotions and dispositions that result, directly and indirectly, from having your own child. Thus, the relevant values are determined by what it is like for you to have your child, including what it is like to have the beliefs, desires, emotions and dispositions that result, directly and indirectly, from having your own child. (I will sometimes call these values "phenomenal values": they are values of being in mental states with a phenomenal "what it's like" character.) In the case where you remain childless, the relevant outcomes are phenomenal outcomes involving what it is like for you to experience the effects of remaining childless, and thus the relevant values depend on what it is like for you to experience childlessness. In other words, the value of your act in *Scenario*, given the way the choice is made, depends largely on the phenomenal character of the mental states that result from it. This is neither surprising nor unusual from a commonsensical point of view.

Of course, having a child or not having a child will have value with respect to plenty of other things, such as the local demographic and the environment. However, the primary focus here is on an agent who is trying to decide, largely independently of these external or impersonal factors, whether she wants to have a child of her own. In this case, the value of what it is like for the agent plays the central role, if not the only role, in the decision to procreate. That said, the value of the choice is also affected if we assess the wider scope of the value of the act, since even in cases with a wider purview, the value of what it is like for the agent to have her own child must be evaluated in order to determine the overall expected value of her choice. For instance, you might choose to have a child because you desire to have some of your DNA transmitted to future generations. But the value of satisfying this desire must be weighed against other outcomes. If, say, the value of what it was like for you to have your own child was sufficiently positive or sufficiently negative, it could swamp the value of satisfying your desire to leave a genetic imprint.

3 What Experience Teaches

All of this might seem perfectly straightforward and unexceptionable. But there is a problem lurking beneath the surface. To see it, begin by reflecting

on an interesting fact about "what it's like" knowledge, such as knowledge of what it's like to see red. The interesting fact is that this sort of knowledge, that is, knowing what it's like, can (practically speaking) *only* be had via experience.

Frank Jackson developed a famous thought experiment to make this point. His example features black-and-white Mary, a brilliant neuroscientist, who is locked in a colorless cell from birth. Mary has never experienced color. Now, she knows all the facts in a complete physics (and other sciences), including all the causal and relational facts and functional roles consequent on knowing these facts, and including all the scientific facts about light, the human eye's response to light with wavelengths between 600 and 800 nanometers and any relevant neuroscience. Yet, when she has her first experience of red, she learns something new: she learns what it is like to see red.

> Mary is confined to a black-and-white room, is educated through black-and-white books and through lectures relayed on black-and-white television. In this way she learns everything there is to know about the physical nature of the world. . . . It seems, however, that Mary does not know all there is to know. For when she is let out of the black-and-white room or given a color television, she will learn what it is like to see something red. . . ." (Jackson 1986, 291)

As Jackson points out, when Mary leaves her cell for the first time, she has a radically new experience: she experiences redness for the first time, and from this experience, and this experience alone, she knows what it is like to see red.

Because of Mary's lack of experience, before she leaves her black-and-white cell, she lacks a certain kind of knowledge. Perhaps that knowledge is knowledge of a physical fact. Perhaps that knowledge involves a lack of a certain kind of ability or know-how. Perhaps it's knowing an old fact in a new way. Or perhaps, after leaving her room, she knows a new fact of some other sort.[9] None of that matters here.[10] The lesson for us is simply that, before she leaves her cell, black-and-white Mary is in an impoverished epistemic position. Until she actually has the experience of seeing red, she cannot know what it is like to see red.

An important feature of this example relies on the fact that, given Mary's exclusively black and white experiences, the experience of seeing red is unique and distinctive for her. Before she leaves her room, she cannot project forward to get a sense of what it will be like for her to see red, since she cannot project from what she knows about her other experiences to

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[9] See Lewis (1990) for relevant discussion.

[10] In other words, we are not concerned here with the debate over physicalism that the example was originally designed for.

know what it is like to see color. As the example is described, then, before she leaves the room, her previous experience is not projectable in a way that will give her information about what it is like to see red. As a result, when she leaves her room and sees red for the first time, her experience is *epistemically transformative*.

Now let's restrict Mary's epistemic situation a little more than it was in Jackson's thought experiment. Before she leaves her room, because she doesn't know what it is like to see red, or indeed what it is like to see any sort of color at all, she also doesn't know what feelings and thoughts she'll experience as the result of seeing red.[11] And so she doesn't know whether it'll be her favorite color, or whether it'll be fun to see red, or whether it'll be joyous to see red, or frightening to see it, or whatever. And even if she could know, say, that she would find seeing red frightening, she wouldn't know how phenomenologically intense this experience would be.

For our purposes, Mary's impoverished epistemic situation means, first, that since Mary doesn't know how it'll phenomenally feel to see red before she sees it, she also doesn't know what emotions, beliefs, desires, and dispositions will be caused by what it's like for her to see red. Maybe she'll feel joy and elation. Or maybe she'll feel fear and despair. And so on. Second, because she doesn't know what emotions, beliefs, desires, and dispositions will be caused by her experience of seeing red, she doesn't know what it'll be like to have the set of emotions, beliefs, desires, and dispositions that are caused by her experience of seeing red, simply because she has no guide to which set she'll actually have. And third: she doesn't know what it'll be like to have any of the phenomenal-redness-involving emotions, beliefs, desires, and dispositions that will be caused by her experience of seeing red. Even if she could somehow know that she'll feel joy upon seeing red, she doesn't know what it will be like to feel-joy-while-seeing-redness until she has the experience of seeing red. And these are all ways of saying that, before she leaves her cell, she cannot know the value of what it'll be like for her to see red.

This means that, when Mary chooses to leave her black-and-white cell, thus choosing to undergo an epistemically transformative experience, she faces a deep subjective unpredictability about the future. She doesn't know, and she cannot know, the values of the relevant phenomenal outcomes of her choice.

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[11] In Jackson's thought experiment, because Mary has all the scientific information we'd have at the end of scientific enquiry, Mary might know what brain states will be caused by seeing red, and thus might, at least arguably, know what beliefs and desires, etc. will be caused. This kind of epistemic access is unavailable to ordinary humans reflecting on what they should do, so we can dispense with this possibility.

4 The Transformative Experience of Having a Child

A person who is choosing whether to become a parent, before she has a child, is in an epistemic situation just like that of black-and-white Mary before she leaves her cell. Just like Mary, she is epistemically impoverished, because she does not know what it is like to have a child of her very own.

Why is she epistemically impoverished? At least in the normal case, one has a uniquely new experience when one has one's first child. Before someone becomes a parent, she has never experienced the unique state of seeing and touching her newborn child. She has never experienced the full compendium of the extremely intense series of beliefs, emotions, physical exhaustion and emotional intensity that attends the carrying, birth, presentation, and care of her very own child, and hence she does not know what it is like to have these experiences.

Moreover, since having one's own child is unlike any other human experience, before she has had the experience of seeing and touching her newborn child, not only does she not know what it is like to have her child, she cannot know.[12] Like the experience of seeing color for the first time, the experience of having a child is not projectable. All of this means that having a child is epistemically transformative.

Now, having a child is not just a radically new epistemic experience, it is, for many people, a life-changing experience. That is, the experience may be both epistemically transformative and *personally transformative*: it may change your personal phenomenology in deep and far-reaching ways. A personally transformative experience radically changes what it is like to be you, perhaps by replacing your core preferences with very different ones.[13] For most people, having a child is transformative in both ways: it is an epistemically transformative experience that is also personally transformative.

Why do parents experience such dramatic phenomenological changes? It is a normal reaction to the intense series of new experiences that one has when one has a child of one's own. This is most obvious when the parent in question is the mother. The intensity and uniqueness of the extended act of carrying the child, the physicality of giving birth, the recognition of the new fact of the existence of one's very own child, and the exertion involved in caring for a newborn results in a dramatic change in one's physical, emotional and mental states. The experiences are also very intense for involved fathers. It is common for fathers to date their changed phenomenal state from the moment they saw or held their newborn.

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[12] Even having a perfect duplicate of yourself around to undergo it and then tell you about the experience probably wouldn't be enough for you to know what it is like—just like a perfect duplicate couldn't tell you enough for you to know what it was like to see color if you'd never seen color before.

[13] See Ullmann-Margalit (2006).

Perhaps the primary basis for the radical change in phenomenology in both parents is the simple fact that the content of the state of *seeing and touching your own newborn child* can carry with it an epistemically unique and personally transformative phenomenological character.[14] This may be the source of why this experience is both epistemically and personally transformative.

There are probably attendant biological reasons for the phenomenological change in parents: when producing, breastfeeding and caring for a child, mothers experience enormous hormonal and other biological changes, and new fathers also undergo significant hormonal changes. Fans of evolutionary biology will hold that there is a biological mandate for the physiological changes in the parents that underlie the felt attachment to one's offspring. In any case, whether the primary basis for one's new phenomenology is simply the experience of producing, seeing, and touching your newborn child, or whether it is being in some new biological state, or whether it is a more extended and complex series of experiences, the parent has an experience he or she has never had before—an experience with an epistemically unique phenomenal character, and moreover, one which can also be personally transformative.[15]

The combination of the epistemically and personally transformative experience of having one's own child brings with it profound changes in other epistemic states. In particular, because you cannot know what it is like to have your own child before you've had her, you also cannot know what emotions, beliefs, desires, and dispositions will be caused by what it's like to have her. Maybe you'll feel joy and elation when she is born. Or maybe you'll feel anger and despair (many parents experience postnatal depression). And so on. Moreover, you can't know what it'll be like to have the particular emotions, beliefs, desires, and dispositions that are caused by your experience of having your child. As a result, if you have a child, and if your experience is both epistemically and personally transformative, many of your epistemic states will change in subjectively unprojectable ways, and many of these changes will be profound changes.

5 Choosing the Ordinary Way Is Not Rational

Recall the normative model for ordinary decision-making given in §2. You, as a normatively rational agent, are supposed to deliberate between acts: you determine the relevant outcomes of each act, the approximate

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[14] The phenomenological character of having a child for a blind or otherwise differently abled person will be different but just as unique.

[15] Even the parent who reacts with numb disbelief or shock upon the presentation of her child has an experience with a uniquely new phenomenal character, despite the fact that the experience does not have the phenomenal character it is "supposed" to have. Indeed, this shocked reaction could have its distinctive character in part *because* it does not have the joyous character the agent was expecting.

probability of these outcomes, the approximate value of these outcomes, and then estimate the overall expected value of each act. After estimating the expected value of each act, you choose the act that has the highest expected value.

The lurking problem I alluded to in §3 comes from the fact that the normative model requires one to determine values of outcomes. And, in fact, *any* standard decision-theoretic model requires one to determine values, at least approximate ones, of outcomes. The problem surfaces when we realize that, first, we want to make the decision based on the phenomenal outcome, that is, based on what we think it will be like to have a child. And second, that if our choice involves an outcome that is epistemically transformative, we cannot know the value of this outcome before we experience it. And if we cannot determine the value of the relevant outcome, we are in the same epistemic position as the agent who, because he doesn't know what the prize will be, cannot rationally determine the utility of winning the lottery (Weirich 2004, 65).

Recall Mary in her black-and-white cell. Imagine that she is trying to decide whether she wants to leave her cell for the first time. As we saw, Mary doesn't know what it will be like to see color. In addition to its being a certain way to see red, maybe it will be terrifying and overwhelming to see color after living in black and white for so long. Maybe the particular fear created by seeing redness will be mind-numbingly awful and paralyzing. Or maybe seeing red for the first time will be blissfully wonderful. She just doesn't know. As I noted above, this means Mary doesn't know what values to assign to the phenomenal states that are the outcomes of her choice to leave her cell. If she cannot rationally determine the values of the relevant outcomes, she cannot use normative decision theory to make a rational choice. (And if she assigns values to these phenomenal states anyway, she is making an unacceptable mistake, for if she cannot know their values, there are no rationally acceptable values she can assign.) Either the decision theoretic model does not apply, because there is no value known for the relevant outcome, or the value she assigns to the outcome is based on an unacceptable belief about what the value should be, and a decision based on an unacceptable belief is not rational.[16]

The very same problem arises in *Scenario*. Here, you are deciding whether to have a child based on the expected value of the act for you and your partner. You think about what it would be like to have a child, how

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[16] If the outcome is assigned a value based on an unacceptable mistake, the case is parallel to other cases involving decisions based on mistaken or unacceptable beliefs. "[T]ake a case in which a decision to travel by train rests on an irrational belief that the plane will crash. The decision is irrational even if it follows by utility maximization from the agent's beliefs and desires" (Weirich 2004, 106). Mary might believe she can assign a value to her future phenomenal state of seeing red, but she is necessarily wrong—and so if she assigns it a value, she is making an unacceptable mistake. Her belief is not rational: the value cannot be known and so her belief about it cannot be based on evidence.

it will affect you and your partner, and how it will affect the other parts of your life, and you decide on the outcome with the best overall effects, where "best overall effects" is short for "effects that maximize expected value." Even if the contemplation is not as detailed or precise as the perfect rational agent could make it, an approximation of this approach embodies our ordinary way of trying to take a clear-headed, normatively rational approach to this extremely important decision.

The trouble comes from the fact that, because having one's first child is epistemically transformative, one cannot determine the value of what it's like to have one's own child before actually having her. This means that the subjective unpredictability attending the act of having one's first child makes the story about family planning into little more than pleasant fiction. Because you cannot know the value of the relevant outcome, there is no rationally acceptable value you can assign to it. The problem is not that a prospective parent can only grasp the approximate values of the outcomes of her act, for then, at least, she might have some hope of meeting our norms for ordinary decision-making. The problem is that she cannot determine the values with any degree of accuracy at all.

As a result, no matter which option in *Scenario* you choose, your decision is not even an approximation of a normatively rational act. It is impossible for you to follow the decision procedure in *Scenario* and choose *For* in a way that is consistent with the ordinary standard for rational decision-making. It is also impossible for you to follow the decision procedure in *Scenario* and choose *Against* in a way that is consistent with the ordinary standard for rational decision-making. Arguably, ordinary rationality does not even *permit* making either choice. Generalizing this, you cannot use our ordinary, phenomenal-based, normative decision procedure to rationally make one of the biggest decisions of your life. You cannot use this procedure to rationally choose to have a child, nor to rationally choose to remain childless.

Distinguishing between evidential and causal probability does not help: it is not rational to choose either option whether we understand your decision as one based on evidence or as one based on a judgment about the causal efficacy of the act. Finally, even a distinction between practical rationality and theoretical rationality will not help: your choice in *Scenario* is neither theoretically nor practically rational in the intended sense.[17]

It should be obvious that, in this discussion, I am abstracting from any moral considerations that might affect the choice to have or not to have children, and I am not taking a position on the nature of moral

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[17] I have been focusing on our inability to assess states with phenomenal characters that directly involve what it's like to have a child. But there are familiar knock-on effects that are less direct. Once you have a child, will you care less about your career? Will you value your child's welfare over your own? Will you still love your cat just as much? Will you love your partner more? Will you love your partner less?—Who knows? It depends on what it's like for you to have your child.

deliberation—i.e., whether it is a form of rational deliberation, and whether its aim is to maximize value. I am starting from what I take to be our predominant cultural paradigm of how to consider the question of whether to have or not to have a child. According to that paradigm, we are to approach this decision as a personal matter where what is at stake is our own expected happiness and a sort of personal self-realization.[18]

And so we find a conflict between the ordinary way we are supposed to make the decision to have a child and the fact that having one's own child is an epistemically transformative experience. This conflict is interesting precisely because the decision to have a child may also be personally transformative. When a decision involves an outcome that is epistemically transformative for the decision-maker, she cannot rationally assign a value to the outcome until she has experienced the outcome. When that outcome may also be personally transformative for the decision-maker, the conflict matters—for she needs to make a big decision, a possibly self-transformative decision, and she cannot conform to ordinary or "folk" norms for rational decision-making when doing so.

6 Objections

My conclusion is controversial. The remainder of the paper will discuss some objections.

6.1 Subjective Ability

Perhaps you think that you can know what it's like to have a child, even though you've never had one, because you can read or listen to the testimony of what it was like for others. You are wrong.

> If you want to know what some new and different experience is like, you can learn it by going out and really *having* that experience. You can't learn it by being told about the experience, however thorough your lessons might be. . . . You may have tasted Vegemite, that famous Australian substance; and I never have. So you may know what it's like to taste Vegemite. I don't, and unless I taste Vegemite (what, and spoil a good example!) I never will. (Lewis 1990, 292)

The experience of having a child is exactly the sort of epistemically unique, epistemically new experience that Lewis is referring to.[19] Having one's first child and tasting Vegemite for the first time are both epistemically transformative (though tasting Vegemite is rarely personally transformative,

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[18] I'm indebted to Tamar Schapiro for this point.

[19] I suppose it is one of the very few ways in which tasting Vegemite is, in fact, similar to having a child.

unless you are an Australian who has been away from home for a long time).

Being around other people's children isn't enough to learn about what it will be like in your own case. The resemblance simply isn't close enough in the relevant respects. Babysitting for other children, having nieces and nephews or much younger siblings—all of these can be wonderful (or horrible) experiences, but they are different in kind from having a child of your very own, perhaps roughly analogous to the way an original artwork has aesthetic value partly because of its origins. (Thus the various memes about "other people's children," including those about how one can dislike other people's children while loving one's own, about how adopting a child "isn't the same" as having one,[20] etc.) Experience with other peoples' children might teach you about what it is like to hold a baby, to change diapers or hold a bottle, but not what it is like to create, carry, give birth to and raise a child *of your very own*. This is obvious even if we discount the conceptual or indexical basis for the uniqueness of the experience, for as I pointed out above, there are purely biological causes that may be sufficient for its uniqueness: the hormonal reactions and other biological responses that stem from physically growing, carrying and giving birth to your own child (mutatis mutandis for fathers). One simply does not get this biological response from babysitting one's niece or changing one's nephew's dirty diaper.

You might think that having a description of what it's like to have a child will tell you what you need to know if it tells you about other experiences that closely resemble the new experience. But it doesn't, at least if you haven't experienced anything that closely resembles the experience, such as already having a child of your own. Lewis (1990, 265–266) points out that even if one can be told that the taste of Vegemite somewhat resembles Marmite, unless one has tasted Marmite, this misses the point. Without the relevant experience, no amount of information about resemblances will help.

The claim that having a child is epistemically transformative does not entail that, if you ascribe a value to what it will be like for you to have a child before you've actually had a child, the value you ascribe will be incorrect. You might get lucky. You might ascribe a value that, once you have the child, turns out to be reasonably close to the actual value. But this doesn't mean that it was rationally acceptable for you to ascribe this value before you could know what it was going to be. It was not rationally acceptable, for you could not know the value before you'd had the experience.[21]

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[20] Please do not confuse this first claim with a second, different claim that adopting a child is somehow less valuable than having a child of one's own. I endorse the first claim and categorically reject the second.

[21] Moreover, the claim that having a child is epistemically transformative does not entail that it is also personally transformative: for most people, it is. For some people, it isn't.

Back to Mary in her colorless cell: Mary might guess that the experience of seeing color for the first time will be stressful and frightening. When she leaves her cell, she might indeed find her experiences of redness to be stressful and frightening. Or Mary might guess that the experience of seeing color for the first time will be fulfilling and satisfying. When she leaves her cell, she might indeed find her experiences of redness to be fulfilling and satisfying. But none of this entails that she was able to know what it would be like for her to experience redness before she actually experienced it, and so none of this entails that it was rationally acceptable for Mary to assign these values before she left her cell.

Can there really be anyone who would grant that the relatively mundane experience of tasting Vegemite for the first time is epistemically transformative, while *denying* that growing, carrying, giving birth to, and raising one's first child is epistemically transformative? If you grant that epistemically transformative experiences are possible at all, you should grant that having your first child is one of them.

6.2 Alternative Decision Procedures

The normative model captures the structure of an ordinary decision-making process. Many people, myself included, take the normative model (or close variations thereof) to provide the most natural framework for decision-making in this particular context, even if it gives us unsatisfactory results. However, it is well-known that decision-making under ignorance creates special problems for agents, and models for decision-making under ignorance have been developed for agents to use.[22] How does this fact affect my argument?

In a nutshell: it doesn't. Our option is to replace the simple version of the normative model with a different version, one which would apply under epistemically impoverished circumstances. This might seem like the obvious way to approach the problem. After all, the real world is messy, and as I discussed in §2, the difficulty of fitting the pristine, clear and precise models of decision theory with the murky viewpoints of actual agents is well-known. Can we accommodate decisions involving epistemically transformative experiences by using special models for decision-making under ignorance?

No. The same problem that arose for our simple normative model arises with these special models, for it is a condition of application for all such models that we are able to legitimately determine the values (or

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But because it is epistemically transformative, you can't know whether you will find the experience personally transformative until you experience it, and so the problem for rational decision-making remains.

[22] See, for example, Levi (1986) and Weirich (2004). Joyce (1999) and Hansson (Unpublished manuscript) give excellent general discussions.

utilities), at least approximate ones, of the relevant outcomes of the act.[23] In the most common models for decision under ignorance, the models specify the values of the outcomes of the act, but—representing agent ignorance—no probabilities are determined. Just as with our original normative model, your choice to have your own child is based on your phenomenal preferences, so to use these decision theoretic models, you have to be able to determine the approximate values of the phenomenal outcomes, outcomes including *what it is like for you to have your own child*. But because you do not know what it is like to have your own child, you lack the relevant phenomenal knowledge you need in order to rationally determine these values.

For example, a simple model for decision-making under ignorance could use the "maximin" rule for making decisions. When "maximining" the agent decides conservatively, that is, makes a safe bet, with the objective of minimizing bad results. To use this decision procedure, we first determine the desirability and undesirability of each relevant outcome. Then we choose the act whose worst outcome has the highest desirability relative to the worst outcomes of all the acts under consideration, that is we, choose the act with the "least bad" outcome. A different, more optimistic model uses a version of the "maximax" rule: calculate the value of each relevant outcome, and then simply choose the outcome that has the highest value. That is, we "maximax" by choosing the act whose best outcome is the most desirable outcome. Either approach allows for rational decision-making under ignorance.

To apply these models, we determine the values of outcomes and then apply a decision rule. The appropriate decision rule depends on the context, which includes the agent's circumstances and dispositions. If, for example, you are choosing from a range of unfamiliar dishes at a new restaurant somewhere in the Midwest, you might wish to employ the maximin rule, selecting the simply prepared steak instead of the interesting, but unusually flavored, seafood dish. Here, outcomes include having a decent steak, having a delicious seafood dish, or having a disturbingly chewy, unpleasantly fishy evening meal. On the other hand, if the restaurant has enough Michelin stars, you might decide to throw caution to the winds and employ maximax reasoning to go for the Aguachile de Pulpo y Calamar after all.

But what if you are visiting Australia for the first time, and need to choose between having toast with orange marmalade and toast with Vegemite? If you've never had Vegemite, nor anything resembling it (such as Marmite), and you want to choose based on what it will be like for you to taste

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[23] Weirich (2004) discusses a range of ways for agents to make normatively rational decisions under ignorance, including models where the standard for rationality is much more tolerant of ignorance. Such models permit cases that lack precise utility assignments. However, in the case of having a child, we are unable to rationally restrict the range of utilities and their probabilities in any reasonable way, preventing us from meeting even this more tolerant standard.

Vegemite, you are out of luck.[24] Neither maximin nor maximax will work for you. In the Midwestern restaurant, you chose between outcomes that resembled what you'd experienced in the past (a decent steak, good seafood, bad seafood), and so you were able to assign values to them. But in a case where you really don't know what it's like to taste the menu item, you can't use maximin, or maximax, or any other decision-under-ignorance rule to rationally make a decision based on what you think it will taste like. You just don't have enough information to deploy the model.[25] You might be able to rationally make your menu choice on another basis, say, where you regard the choice merely as a fun, low-stakes gamble, but a decision on that basis is not analogous to the phenomenally-based decision to have a child.

You might think, hang on, we can just parse the range of outcomes so that they are described as outcomes like "Vegemite tastes delicious," and "Vegemite tastes disgusting."[26] But simply adding terms like "delicious" or "disgusting" to the description of the outcome won't give you the information about values that you need. Intuitively speaking, you need to know more in order to assign them values. You need to know how phenomenally intense the state described by "Vegemite tastes delicious" and how phenomenally intense the state described by "Vegemite tastes disgusting" is, and you need experience in order to know this.[27]

We find ourselves with the very same problem in *Scenario*. No standard model of decision under ignorance is available to the prospective parent who chooses based on what she thinks it will be like to be a parent, for, just as in the Vegemite case, she cannot determine the values of the relevant outcomes. As a result, the models don't apply.

Now, of course, I am assuming various constraints here: it isn't *metaphysically impossible* to determine the values of the outcomes. It is simply epistemically impossible given very reasonable and appropriate real-world constraints. For example, if you had a perfect physical duplicate who underwent the experience of having a child and then told you how to assign values to the outcomes for your version of the experience, you could employ a decision-theoretic model. This sort of pretend scenario, and various other sci-fi alternatives we might be able to dream up, are obviously irrelevant in this context.

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[24] Some people find Vegemite absolutely disgusting. Others think it is delicious.

[25] As Weirich points out: "It would be difficult, even for a perfect mind, to sensibly assign intrinsic utilities to states of affairs in the absence of relevant experience. For instance, it would be difficult to assign intrinsic utility to tasting pineapple in ignorance of its taste, or to assign intrinsic utilities to eating items on the menu in an Ethiopian restaurant, even given their full descriptions, in the absence of experience with Ethiopian cuisine" (2004, 65).

[26] I'm indebted to Elizabeth Harman for raising this objection.

[27] One way to put it is to say that you need to be able to grasp the phenomenal content of the proposition described by "Vegemite tastes disgusting," and you can't grasp this content until you've actually tasted Vegemite. Weirich puts the point this way: "the experience may be needed to entertain a proposition in the vivid way required for its intrinsic utility assessment" (2004, 66).

There is another issue here that should be raised: not only is the phenomenal outcome *what it's like to have your own child* a relevant outcome of your choice, it's an outcome whose value might *swamp* the other outcomes. In other words, even if other outcomes are relevant, the value of the phenomenal outcome, when it occurs, might be so positive or so negative that none of the values of the other relevant outcomes matter.[28]

Now, we need not take the fact that normative decision theoretic models don't work well for the case of having children as a criticism of decision theory, for sophisticated decision theorists often think of decision theory as a useful evaluative tool, not as a method one should use to determine, in practical circumstances, what sort of deliberation is rational.[29] The point being made here is that you cannot rationally decide to have a child based on what you think it will be like for you to have a child, and debates about how to make this important life choice should reflect this fact.

6.3 Eliminate the Subjectivity in the Decision Procedure

The source of the problem is the epistemically transformative nature of the experience of having one's child. One way to circumvent this problem is by dispensing with projectability, that is, ignoring your own personal preferences when you choose. You can change the decision procedure and choose to have a child based *solely* on the assumption that anyone who has a child is more likely to end up in a class of individuals who maximize their overall utility, ignoring your own personal beliefs, desires and other phenomenal projections about the future.

Let's consider this possibility. After choosing, you could end up in one of four different classes. The class of individuals for whom, after having a child, the overall value of having a child is higher than it would have been if they had remained childless, is *Lucky Parents*. The class of individuals for whom, after having a child, the overall value of having a child is lower than it would have been if they had remained childless, is *Unlucky Parents*. The class of individuals for whom, having decided to not have a child, the overall value of the choice to be childless is higher than it would have been if they had had a child, is *Lucky Child-frees*. Finally, the class I'll label *Unlucky Child-frees* is the class of individuals for whom, having decided to be childless, the overall value of the choice to not have a child is lower than it would have been if they had had a child.

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[28] Of course, swamping can work in the other direction as well. There may be cases where the stakes are relatively low, and values of, say, certain nonphenomenal outcomes will clearly swamp the values, whatever they might be, of the relevant phenomenal outcomes. For example, if in the interest of promoting Australian tourism, foreigners receive a large financial reward for trying Vegemite for the first time, then if you are not Australian, you might rationally choose to try it on this basis. But in high stakes cases like that of having a child, one would have to make the case that such nonphenomenal outcomes exist. What is much more likely is that the value of what it is like to have the child will swamp the other outcomes.

[29] I'm indebted to Kenny Easwaran for this observation.

Now if Lucky Parents is much larger than Unlucky Parents, and Unlucky Child-frees is much larger than Lucky Child-frees, it might seem rational to choose to have a child, simply because you think, given the numbers, if you have a child you are far more likely to be in Lucky Parents than in Unlucky Parents, and you successfully avoid being classed in Unlucky Child-frees. And indeed, many people seem to assume something like the claim that Lucky Parents is much larger than Unlucky Parents. They also seem to assume that Unlucky Child-frees is much larger than Lucky Child-frees: they assume that people increase their happiness and well-being by having children and that childless people decrease their well-being (and as a result are unhappy or unfulfilled) because they do not have children of their own.

However, current empirical evidence suggests that this assumption is false. While the highs seem to be higher for parents, the lows seem to be lower, and many measures suggest that parents with children in the home have, on average, a lower level of overall life satisfaction.[30] Moreover, individuals who have never had children report similar levels of life satisfaction as individuals with grown children who have left home (Simon 2008; Evenson and Simon 2005). A recent analysis of survey data covering a wide range of the empirical results concerning parenthood indicates that *no* group of parents, including those whose children have grown and left home, where those groups are determined by standard sociological classifications such as income, marital status, gender, race, education, and mental health, report higher levels of overall emotional well-being than non-parents (Simon 2008; Evenson and Simon 2005).[31] Psychological results are more mixed: some studies report that parents have lower levels of subjective well-being (Kahneman et al. 2004), while others report that fathers enjoy a higher level of life satisfaction but mothers do not (Nelson et al. 2013).

At best, we have little or no evidence that Lucky Parents is much larger than Unlucky Parents, or that Unlucky Child-frees is much larger than Lucky Child-frees. At worst, the evidence suggests that choosing to have a child is likely to reduce your overall well-being. If you reject the empirical results (which are mixed and admittedly controversial), you find yourself without evidence to guide your decision. If you accept what the balance of evidence seems to show, then the rational choice requires you to act as though your own feelings don't matter. Independently of your own feelings on the issue, you must remain childless, for those who remain childless are

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[30] McClanahan and Adams (1989) describe how a number of studies "suggest that parenthood has negative consequences for the psychological well-being of adults." The negative impact of children on happiness and life satisfaction has been widely discussed in sociology, psychology and economics. See, for example, Nomaguchi and Milkie (2003) and see Simon (2008) for a nice overall summary.

[31] The research does show that marital status, education and financial status influence the degree to which parenthood negatively impacts emotional well-being. See Kahneman et al. (2004) and Nelson et al. (2013).

more likely to end up in a class of individuals that have maximized their overall utility.

Thus far, it looks like, if you accept the new decision procedure, you should either hold off on deciding, due to lack of conclusive evidence, or you should ignore your own feelings and decide to remain childless.[32] This is an interesting result. But it is *strange*. First of all, it does not bode well for the future of the species. Second, deciding *solely* on the chance that you'll end up in a class of individuals who maximized their overall utility cuts hard against the way we ordinarily consider the decision.

Imagine Sally, who has always thought that having a child would bring her happiness, deciding not to have a child simply because she knows not having one will maximize her utility. For her to choose this way, ignoring her subjective preferences and relying solely on external reasons, seems bizarre. How could Sally's own phenomenal preferences not matter to her decision? Even Lisa, who, antecedently, does not want a child, and then decides not to have a child based solely on the evidence, is not choosing in an ordinary way. Her choice, if rational, has nothing to do with her phenomenal preferences to not have a child. Lisa does not have special insight into how she has always known that she'd be worse off as a parent: instead, she merely gets lucky. It just so happens that her phenomenal preferences support the same choice as the evidence does. Alternatively, imagine that the sizes of the classes were reversed so that Lucky Parents was much larger than Unlucky Parents, and Unlucky Child-frees was much larger than Lucky Child-frees. Now consider Anne, who has always thought that having a child would bring her misery, deciding to have a child simply because she knows it will maximize her utility. Again, the decision procedure seems bizarre from our ordinary perspective. Choosing rationally requires a very different way of thinking about the decision than we ordinarily think it does—to be rational, *we have to ignore our phenomenal preferences*.[33]

You might think that none of this applies to you. For you are a sophisticated thinker—you know, or at least you have educated, sophisticated beliefs—about which psychological characteristics really matter when you become a parent. You, unlike the unwashed masses, can judge for yourself whether you are more or less likely to end up in Lucky Parents if you have a child. I see no rational basis for a belief in such super-empirical abilities. There just isn't enough evidence available to support this sort of reasoning. Moreover, assessments of subjective well-being using the sorts of sophisticated psychological classifications that individuals would need to use to make an individually tailored, evidence-based decision are

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[32] Depending on the context, this may amount to the same thing.

[33] A way of putting the problem is like this: decision-theoretic models are constructed as tools for evaluating decisions from the third-person perspective. But our ordinary way of making personal decisions relies on the first-person perspective. This can result in a fundamental conflict.

in their infancy ([Kahneman and Kreuger 2006](#)). Future empirical research might uncover the properties an individual needs to have in order to end up classed in Lucky Parents.[34] But we lack such evidence right now.[35]

As a result, the prospective parent finds herself in an interesting dilemma: ignore what she personally thinks about whether she wants to have a child and decide rationally, or take into account her own beliefs and projections about what it would be like and fail to decide rationally. Neither horn is attractive.

7 Conclusion

Contrary to popular opinion and common sense, contrary to what your parents might tell you, and contrary to the picturesque ideal romanticized by many a chick-lit novel, popular parenting guide, life coach website, and fashion magazine, you cannot rationally choose to have a child based on what you think it will be like to have a child. And, contrary to what those who are committed exclusively to their careers, or who dislike being around the children of other people, or who value their lazy weekends might believe, you cannot rationally choose to remain childless based on what you think it would have been like to have a child.

You can change the method of choosing so as to make it rational by making your choice based on something other than your phenomenal preferences. And indeed, in the past, non-subjective facts and circumstances played a much larger role in the causal process leading up to parenthood. Before contraceptive devices were widely available, you didn't choose to have a child based on what you thought it would be like. Often, you just ended up having a child. And to the extent you actively tried to choose to have children, often it was because you needed an heir, or needed more hands to work the farm, or whatever. But this is not the approach we ordinarily take now.[36] If you dispense with your phenomenal preferences,

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[34] Another interesting possibility is that, just by having a child, one's preferences may change in a way that changes her assessment of the value of having a child. This is directly related to the way that the experience of having a child can be both epistemically and personally transformative. If the preferences had by the prospective parent before she has a child were unchanged by the experience, they might entail that the phenomenal outcome of having a child would have a negative value. But perhaps the very fact of having the child changes the prospective parent's preferences such that the phenomenal outcome of having a child turns out to have a positive value. (There is sociological evidence that this actually happens.) This possibility raises interesting questions about how one might employ higher-order decision-theoretic structure. (I'm indebted to Tania Lombrozo here.) Ullmann-Margalit ([2006](#)) discusses related issues.

[35] Frankly, I suspect that more evidence will only go so far, because the ability to determine which class one would be located in after the decision still requires a kind of self-knowledge that we can't have with epistemically transformative experiences. But that issue is beyond the scope of this discussion.

[36] See [Zelizer](#) ([1985](#)) for the classic account of how children have come to be regarded as emotionally priceless.

you reject a central tenet of the ordinary, twenty-first century way of thinking about the choice.

How could common sense have gotten things so wrong? I suspect that the popular conception of how to decide to have a child stems from a contemporary ideal of personal psychological development through choice. That is, a modern conception of self-realization involves the notion that one achieves a kind of maximal self-fulfillment through making reflective, rational choices about the sort of person one wants to be. (The rhetoric of the debate over abortion and medical advances in contraceptive technology have probably also contributed to the framing of the decision to have a child as a personal choice.) While the notions of personal fulfillment and self-realization through reflective choice might be apt for whether one chooses to grow one's own vegetables, what music one listens to or whether one does yoga, it is not apt for the choice to have a child. Some will conclude from my argument that we should base the decision to have a child on the values we assign to nonphenomenal outcomes or that moral considerations need to play a larger role. These conclusions might be warranted.

My view is not that it is right or wrong to have children, nor that you should not be happy with your choice, whatever choice you make. My view is simply that you need to be honest with yourself about the basis for this choice. For example, when surprising results surface about the negative satisfaction that many parents get from having children, telling yourself that you *knew* you would not be among that class of parents, and that's why you chose to have a child, is simply a rationalization—in the wrong sense—of your act. Likewise, telling yourself that you *knew* you wouldn't be happier as a parent, and that's why you chose not to have a child, is simply an act of self-deception. You can be happy that you have a child, or happy that you are childless, without wrapping that happiness in a cloak of false rationalization.

My argument also has consequences for those who want to be able to physically conceive, carry and give birth to a child, but are unable to do so. If you want to have a child because you think having a child will maximize the values of your personal phenomenological preferences, and as a result of your inability to have a child (and thus your inability to satisfy these preferences) you experience deep sadness, depression, or other negative emotions, my argument implies that your response is not rational. This is disturbing and some might find it offensive, but it is true. Such a response is not rational. That does not mean your response is wrong, or blameworthy, or subjectively unreasonable.

All of this raises larger issues, for the sort of subjective information that experience brings is central to many of our most important personal decisions.[37] Any epistemically transformative experience that changes the

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[37] I discuss this in more detail in my *Transformative Experience*, where I consider ways in which my argument applies to choices that change our phenomenological capacities, such as getting cochlear implants, and life-course-decisions such as choosing a career.

self enough to generate a deep phenomenological transformation creates significant trouble for the hope that we could use our ordinary subjective perspective to make rational decisions about major life events.

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