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The Biden Administration's Initiative to Modernize Regulatory Review

Abstract: The Biden administration's initiative to modernize regulatory review, while attempting to incorporate various criticisms of cost-benefit analysis (CBA), was hobbled by an insufficient theoretical analysis. Specifically, the administration failed to address its implicit naturalization of the economic subject, under which subjects and their preferences are regarded as exogenous givens. The justification for CBA is that it can use information regarding individual "willingness to pay" (WTP) or "willingness to accept" (WTA) to discern these preferences, and thereby create efficient policy. But if the naturalized subject is fictional, then there is nothing to discern. Subjects and their preferences are not waiting to be found; rather, they are endogenously shaped. Recognition of this endogeneity would allow for preferences, or values, constituted through democratic spaces to be no less salient to policy than those ostensibly exogenous to the market. Further, it would allow for regulatory institutions themselves to serve as those democratic spaces.

Keywords: cost-benefit analysis, neoclassical economics, welfare economics, administrative law, regulatory law, Biden administration, climate change

I. Introduction

Since at least its institutionalization by executive order under the Reagan administration, the use of cost-benefit analysis (CBA) in regulatory law has been criticized for privileging "efficiency" above other policy objectives, including distributional equity, a sustainable environment, and social justice more generally (Shabecoff 1981; Rose-Ackerman 2010). In January 2021, the Biden administration issued a presidential memorandum on "Modernizing Regulatory Review" (Biden 2021, hereafter the "MRR Memo") addressing these concerns. Among other things, the MRR Memo directed the Director of the Office of Management and Budget (OMB) to make recommendations furthering the goals of "public health and safety, economic growth, social welfare, racial justice, environmental stewardship, human dignity, equity, and the interests of future generations" (MRR Memo, 1). On April 7, 2023, following the directive, OMB Director Richard Revesz issued proposed revisions to Circular

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A-4, providing guidance to regulatory agencies, for public comment. On November 9, 2023, the OMB issued its final version of Circular A-4.

The initiative to modernize regulatory review also included an attempt to broaden the scope of public participation in the regulatory process. An executive order issued on April 6, 2023, pursuant to the MRR Memo, directed that agency regulations "should be informed by input from interested or affected communities," and that "opportunities for public participation [in the review process] shall be designed to promote equitable and meaningful participation by a range of interested or affected parties, including underserved communities." These broad directives were elaborated on further in a July 19, 2023 memo from Richard Revesz, Administrator of the Office of Information and Regulatory Affairs (OIRA), with the subject "Broadening Public Participation and Community Engagement in the Regulatory Process" (Revesz 2023, hereafter the "OIRA Memo").

But whatever the ambition of the Biden regulatory reforms to decenter the role of CBA and to create a more democratic regulatory process, that ambition was limited by the administration's failure to critique the underlying theoretical, ontological, and normative logic on which CBA rests. As I argue below, that logic rests on a naturalized picture of the economic subject inherent in neoclassical thought, according to which both the subject and his preferences[1] are exogenously given. Accomplishing a truly democratic practice of regulatory review would require that we acknowledge the *endogenous* construction of the subject: a subject whose goals, values, and desires *depend on the social and institutional context*—whether that be the institution of the market or democratically constructed political institutions. With the recognition of this endogeneity, no good reason can be advanced for privileging the desires that emerge in one institutional context over those of another. This in turn means that the kinds of self-interested preferences that are purportedly "behind" the market, but are at least partly *a function of* the market, need not guide policymaking; altruistic or other-regarding goals, no less endogenously constructed or dependent on institutions—including the institutions of democratic regulatory practice—would appear no less salient.

While the Biden administration did take measures to democratize the regulatory process, those measures appeared to merely *supplement* measures curtailing the excessive use of CBA, without recognizing that CBA and democracy are fundamentally intertwined. For example, Sabeel Rahman, who served in the Office of Management and Budget (Meyers 2021), argues in favor of expanding the role of democracy in regulatory agencies partly on the grounds that it serves as a check on the "domination" that comes from excessive use of "expertise" in the regulatory process, including heavy reliance on CBA (Rahman 2016, 90). But this position concedes too much of the debate. CBA is not the product of technical expertise. It is not pure positive science. Indeed, it is at least in part pseudoscience. The entire enterprise rests on a picture of individual preferences, valuations, and decision-making that is pure conceit. It is through this conceit that the economics profession arrogates to itself the expertise to tell society what it wants, and by how much. But the space for forming, deliberating, and giving shape to society's values is precisely the function of democratic institutions. If economists claim the "expertise" to measure what value we place on things, and to what degree we place value on things, then of what use is democracy? We might as well leave it to economists to tell us what we want.

[1] As feminist scholars have suggested, the neoclassical subject is not gender neutral—even if presented as such on the surface (for example, Hewitson 1994).

I argue that this failure to recognize the fundamentally pseudoscientific nature of CBA resulted in a deep incoherence in the Biden administration's approach to the question of when costs and benefits can be monetized. A close examination of Circular A-4 leads us to reject the notion that the weighing of monetized costs and benefits is value neutral. It is not. As a branch of neoclassical welfare economics, CBA rests by its very nature on a normative posture. Neoclassical welfare economics has lodged itself so firmly in policy questions that its normativity is obscured. But the very notion of a "value-free welfare economics" amounts to a "contradiction in terms" (Blaug 1997). To the extent that normative considerations generally are open to debate, so too is welfare economics. Therefore, the battle over the role and extent of CBA is not one of unassailable economic facts versus contested and debatable sets of values; rather, the entire terrain is set in the universe of values. The question is what sorts of values will take priority. Framing the question as one of economistic facts versus values of equity, environmental preservation, and distributional justice has the implicit effect of marginalizing those values in favor of the purportedly objective factual record—no matter how much weight a memo (even a presidential one) places on them.

I argue that preservation of those values requires that we reject the picture of the naturalized subject on which CBA rests, and instead acknowledge that our subjectivity is constructed by relevant institutions. The kinds of values we may embrace in our capacity as members of a democratic polity might well be distinct from those we value as individuated, atomized actors in a market. It follows that the values facilitated and articulated in the context of democratically constructed institutions are at the least no less valid—and arguably more valid—as a foundation for policymaking than the monetized CBA metrics born of the neoclassical view of the subject. It also follows that CBA is not merely an unnecessary feature of the regulatory state; it is an impediment to expanded public participation in and democratization of regulatory institutions.

To make this case I analyze Circular A-4 in Part II, illustrating its endorsement and reflection of core principles of CBA. I argue that these core principles are founded on the neoclassical account of the human subject, under which preferences are exogenous and represented in terms of rates of substitution, which in turn manifest in a willingness to pay (or to accept) in monetary terms. These core principles, I argue, are visible throughout Circular A-4, including in its discussion of the monetization of goods not typically traded on explicit (or in some cases even implicit) markets, such as clean air, the preservation of nature, and mortality risk. I compare this discussion to the Circular's discussion of nonmonetizable goods such as dignity and civil rights. I argue that there is a theoretical incoherence in Circular A-4's discussion of monetizable as compared to nonmonetizable goods, and that this incoherence stems from insufficient theoretical reflection on the neoclassical foundation of CBA. This lack of reflection leads to a failure to consider the ways in which alternative subjectivities may be endogenously shaped by institutions.

In Part III, I turn more fully to an examination of the neoclassical picture of the economic subject. This first entails a brief review of the history of the naturalization of this subject, focusing on the works of William Stanley Jevons. Second, it entails an examination of the core role for this subject in the standard welfare economics justification for CBA. I then look at conceptions of non-neoclassical subjects with endogenously shaped valuations and desires, with a specific focus on empirical evidence for the endogeneity of altruistic or other-regarding preferences. The claim here is that standard CBA method and practice, even if they acknowledge that agents can have other-regarding desires, typically fail to acknowledge their endogenous nature, and thereby still regard themselves as "finding" or "picking out" purportedly "true" desires or preferences.

In Part IV, I first consider how democratic institutions might facilitate a different sort of endogenously constructed valuing subject than do market institutions, and how the process of deliberation might contribute to this process. I then examine scholarly literature arguing that regulatory agencies have the potential to, and should, become sites for expanded democracy and opportunities for public participation, including by the most marginalized of society's members. It is precisely through regulatory institutions, I argue, that varying values placed on policy goals can be voiced, registered, and articulated, and the results would have no less legitimacy than the results ostensibly "discovered" through the standard use of CBA. I use the example of the discount rate in regulation of climate change to illustrate how values placed on future lives or other future benefits could be endogenous to the institutional context, such that the future is regarded as more valuable in the political space of a democratized regulatory institution than it would be using standard assumptions about the time preference of neoclassical agents.

I next turn to the OIRA Memo, arguing for broadening public participation in regulatory decisions. I observe that the OIRA Memo, while acknowledging that public participation can help define what *constitutes* a "cost" and a "benefit," nonetheless constrains the public from using the regulatory space to communicate the *worth* or *value* of various benefits, because of the central role CBA occupies in Circular A-4. Again, I use the valuation of the future as an illustration.

Because these remarks on democratic institutions as appropriate spaces for registering the relative weights or valuations of different possible benefits and policy goals may seem unsatisfactory to the question of how decisions in these institutions are to be reached, I briefly review the concept of "scenario analysis" as a method and approach for adopting nonmonetized, qualitative analysis of policy goals, highlighting how this qualitative approach constitutes an implicit acknowledgment of the ineliminable role of normative judgments in policymaking. I acknowledge at the same time that scientific analysis can and should play a role in the decisions reached by democratically constituted regulatory institutions. However, even though scientific analysis cannot and should not be eschewed in any democratic processes informing regulatory goals, it is also the case that (1) scientific analyses cannot *by themselves* dictate normative judgments (which in turn are ultimately the product of political decisions) and (2) that CBA is *itself* a normative criterion for arriving at "optimal" policy outcomes, although its scientism allows it to appear as the only objective method for determining optimality. I once again use the example of climate change to illustrate the point, this time focusing on the Intergovernmental Panel on Climate Change (IPCC) temperature targets and the Paris Agreement.

In Part V, I anticipate a possible objection to all the foregoing: Money surely matters. That is, whatever goals and values may emerge from democratic practices and institutions, the financial costs of achieving those goals cannot be irrelevant. I agree with that statement, and accordingly argue that despite the scientism of CBA, there is a space for economic expertise in policy decisions. Specifically, I argue that, while economists have no business claiming objective insight into the "right" way to appropriately value possible policy goals, they nonetheless have something to offer in determining cost-effective methods of achieving those goals. The mere fact that economists cannot make objective value-neutral claims about allocative efficiency does not mean that they have nothing to offer on the question of productive efficiency. However, any such costs should be conceived objectively, not subjectively. That is, they should be conceived of in terms of actual resources forgone—not in terms of purportedly exogenous individual subjective dollar valuations.

Before embarking on this analysis, I think it important to comment on the current political state of affairs. At the time of this writing, Trump is president-elect. The likelihood that a Trump

administration will broaden democratic participation in regulatory institutions, let alone that it will dispense with, or even diminish the role of, CBA, is essentially nil. Instead, the attack on the administrative state, already begun with the Supreme Court's reversal of the *Chevron* doctrine, will likely continue apace with the implementation of Project 2025. Proponents of this attack on the administrative state argue that this is all in the interest of "the people" (Heritage Foundation 2024, 3:51). But an examination of Project 2025 reveals a consistent (and unsurprising) view that regulatory law is simply too much of a constraint on industry (see Dans and Groves 2023, 417–18), even though it is hardly self-evident that the interests of industry are a reasonable enough proxy for the interests of "the people."

The conflation of "industry interests" with "the common good" may appear less strange if we adopt the perspective that the market is the sphere where the preferences of all economic agents are correctly registered. Advocates for the vast attack on regulatory rulemaking that will surely happen under the Trump administration can justify their mission as being in service of "the people" provided that we understand "the market" as the space in which individuals act on their autonomous, true preferences, and that the proper role of the state is to allow the unimpeded function of the market. This understanding ignores, first, that the "market" is *itself* an institution (in turn constructed and facilitated by legal-political institutions) and, second, that the preferences, desires, and values of individuals and communities are themselves endogenously shaped by institutions. Finally, this view ignores the possibility that the sorts of values that our political institutions should reflect are those likely to arise when acting in our capacity as members of a polity, and not simply as individuals in a market.

An inclusive regulatory apparatus has no need for, and indeed is only hampered by, CBA. Ideally, a future presidential administration will take this argument to heart.

II. Circular A-4's Reliance on the Neoclassical Economic Subject

As indicated above, the Biden administration's adoption of the tenets of CBA in Circular A-4 continues policy originated in the Reagan administration. Critics of this policy have long contended that it favors industry, in no small measure because, while the costs of a regulation borne by industry are relatively straightforward to measure (generally, by using the market prices for resources and technology required to comply with the relevant regulation), the benefits are not (Adelman and Sinden 2024, 16–17; Graves 2012). Indeed, much empirical literature bears out the claim that CBA has, in practice, favored industry and placed limits on attempts to enact publicly beneficial regulation (Driesen 2005b; McGarity 2005, 286–87).[2]

One reason for this is the difficulty in obtaining good scientific data on the benefits of a rule. For example, while animal studies may give some indication of the toxicity of a substance, there is often scientific uncertainty (along with the absence of good epidemiological data) on how best to extrapolate to humans (Adelman and Sinden 2024, 33). But a more conceptually intractable problem is that much

[2] To be sure, some scholars have argued that the use of CBA can be and has been used to support socially beneficial regulation (Revesz and Livermore 2008.) No doubt one can point to examples (see, for example, Adelman and Sinden 2024). Indeed, below I discuss the example of the monetization of "dignity," and how this monetary value, if included by the DOJ, might justify regulations providing greater access for the disabled. But the larger point is that there simply is no *singular, univocal* way to find a dollar value for the "benefits" of a regulation. CBA's claim on the "right" method for determining that dollar value (interpreting human behavior as reflecting an exogenous "willingness to pay") obscures what otherwise is a fundamentally normative, value-laden, political judgment, which should be arrived at through a democratized regulatory apparatus. All of this is argued below.

of what we consider to be the "benefits" of regulation are not traded on the market. They therefore do not come with price tags.

The question, then, of how to monetize the potential benefits, including nonmarket benefits, of a regulation has thus plagued CBA since its inception (see, for example, Sinden 2019, 75). One possible response is to acknowledge that not all conceivable benefits *are* monetizable. Indeed, as noted above, the Biden administration acknowledged precisely this. Unfortunately, nothing about the use of CBA makes it clear precisely which benefits are "monetizable" and which benefits are not.

I argue that this is because of the failure to reflect (not merely by the Biden administration, but by the economics profession generally) on the nature of the economic subject on which CBA is founded. In particular, it turns on the failure to critically examine the notion of an exogenous "willingness" in the economic subject. It is this failure of critical examination, and its manifestation in Circular A-4, to which I now turn.

A. Treatment of Nonmarket Goods in Circular A-4

One could argue that monetization is only appropriate for benefits that are typically treated as commodities on a market, and therefore have explicit prices. However, in standard CBA practice, this view would be far too restrictive. Instead, the architects of CBA have designed methods to find monetary values in cases where there is no explicit market for a benefit (see, for example, OECD 2018, chaps. 2–3). Examples include favorable air quality, good health, the preservation of nature, and life itself (Bockstael and McConnell 2007; Ackerman and Heinzerling 2002).

Circular A-4 illustrates the Biden administration's explicit endorsement of monetizing just these sorts of benefits (Office of Management and Budget 2023, hereafter "Circular A-4 2023," 40–46, 48–54). Whatever the Biden administration meant by recognizing limits on monetization, it clearly does *not* mean to exclude the world of noncommodities from CBA. Rather, it regards their inclusion in monetary calculations as entirely justifiable.

To understand this justification, we need to look closely at how the practice and implementation of CBA in policy—wittingly or otherwise—relies on a certain *picture of persons*, or of the human *subject*. In particular, it relies on the *neoclassical* picture of the subject.[3] While the picture of the neoclassical subject relies on several assumptions, the one most pertinent to the present investigation concerns the exogeneity of preferences (DeMartino 2000, 77; Gintis 1974, 416; see also Harrod 1938, 393, arguing that economics properly takes individual preferences as "givens"). Such exogenous preferences are represented in terms of *rates of substitution*. That is, each individual is presumed to value goods in terms of the rates at which they would be substitutable or exchangeable for other goods, without any loss of utility for the individual. Because each individual has "rates of substitution" residing within them (perhaps within their heart or soul), they also have a "willingness to pay" (WTP) for goods in monetary terms, or a "willingness to accept" (WTA) to part with them. These are defined in terms of the *maximum* amount they would be willing to pay, or the *least* they would be willing to accept (O'Brien 2014; OECD 2006). Thus, the WTP or WTA for goods is the expression of a subject's individual valuation in terms of a monetary rate of exchangeability (Hicks 1946, 39).

[3] The question of what constitutes "neoclassical" economic thought invites a host of opinions, which I will not canvas here.

It follows from the exogenous character of these preferences that internal rates of substitution *account for* or *explain* exchange behavior in markets. That is, they exist logically and ontologically prior to the market, such that the market simply *reveals*, or *reflects*, these preferences; it is not responsible for them. It furthermore follows that the absence of an explicit market for some good does *not* imply that exogenous preferences (representable in terms of internal rates of substitution) do not exist. Rather, it merely throws up a methodological obstacle to finding them. The task becomes finding a way to surmount this obstacle.

B. Construction of Proxies for Monetization of Costs and Benefits

This picture of the neoclassical subject is central to CBA. It therefore animates, and is at the core of, Circular A-4. This is evident throughout the document. For example, Circular A-4 highlights WTP and WTA as "key concepts" in "valuing benefits and costs" (Circular A-4 2023, 28). It goes on to state that benefits and costs are best captured using market prices, noting that "market prices provide rich data for estimating benefits and costs based on WTP and WTA" (ibid. at 29). However, where "markets do not exist and allocation is via some other mechanism . . . estimating the value of [a] benefit or cost . . . requires developing appropriate *proxies*" (30, emphasis added). In other words, it is the exogeneity of preferences, and their status as ontologically prior to market relationships, that require the practice of CBA to attempt to divine WTP[4] in the *absence* of a market.

Such an attempt is on display throughout Circular A-4 through the use of several common methods, including "revealed preference" methods. These methods attempt to find implicit markets where explicit ones are absent (Circular A-4 2023, 30–32). As one example, the Circular discusses air quality. Since air quality is typically not something bought and sold on the market, a "proxy" must be found. Often, this is done by inferring consumer WTP for air quality from differences in prices and air quality in otherwise comparable housing markets (Bishop et al. 2020; Smith and Huang 1995). Another revealed preference technique is the so-called "travel cost" method for determining "recreation demand," typically used to determine the monetary benefits of natural areas used for recreational purposes, such as parks, lakes, and so on (Parsons 2003; Circular A-4 2023, 34). Because these natural recreational areas are typically not traded on the market, the cost of travel becomes the "proxy" for the market in finding WTP.

Nevertheless, it is sometimes exceptionally difficult or impossible to use *any* sort of behavior as evidence of a WTP for a nonmarket benefit. This obstacle typically presents itself in the case of so-called "existence values"—that is, the value individuals place on goods because of their sheer existence (even if they go unused) (Attfield 1998; Krutilla 1967). Examples of existence values include the value we place on the preservation of the features of our natural landscape, the preservation of endangered species, and the like (Kopp 1992). Since revealed preference methods are generally not available in these cases, economists often resort to a "stated preference," where individuals are simply asked their preferences (and WTP) through surveys (Whitehead and Blomquist 1991).

However, according to Circular A-4, "other things equal, revealed preference data is preferable to stated preference data" (2023, 37). Perhaps paradoxically, this is owing precisely to the document's faith in, and understanding of, exogenous preferences. Since these preferences are only properly understood as manifesting in a willingness to pay (because of our internal rates of substitution), this

[4] Following frequent convention, I use WTP in this article to refer to both WTP and WTA (see Robinson and Hammitt 2011, 26n31), notwithstanding the possibility of divergence between the two (see note 13 below).

willingness can only truly be seen in a certain kind of *behavior*. Talk, as they say, is cheap (Boudreaux et al. 1999; Fifer et al. 2014). It is one thing to *say* what you are willing to pay; it is another thing to demonstrate it. Hence, it is our behavior that best reveals our inner willingness. Indeed, discussion in the relevant literature of the possibility of "hypothetical bias" in stated preference methods implicitly assumes that "true" preferences are always expressed in market behavior, and that any stated preferences that diverge from this behavior are necessarily a "bias" (see, for example, Hausman 2012). Circular A-4 endorses this logic in full, observing that while "revealed preference data are based on actual decisions, where market participants enjoy or suffer the consequences of their decisions" respondents in stated preference surveys do not have the same "incentives" and thus may not "offer thoughtful responses that are consistent with their preferences" (Circular A-4 2023, 37).

One other notable example of a method for discerning a WTP in the absence of an explicit market concerns placing a value on life. This problem arises often in regulatory law, since fatality reduction is a frequent regulatory goal. As daunting a prospect as placing a monetary value on life may seem, a generally accepted method for this has been part of CBA practice for nearly four decades (Viscusi 2018; Earley 1985). The method involves finding WTP for mortality *risk*, and then aggregating that data to find the value of a "statistical life." Circular A-4 defines a "statistical life" as the "sum of risk reductions expected in a population" (Circular A-4 2023, 49). Using the Circular's example, if a policy reduces the risk of mortality by one in one million, and the policy is applied to two million people, then two "statistical lives" have been preserved by the policy. If the WTP for this risk reduction of one in one million is $10, then the value of a statistical life is computed as $10,000,000 ($10 * 1,000,000). The underlying reasoning is that, given this WTP, a *collective* payment of $10,000,000 would need to be made to expect the preservation of one life.

It would therefore appear that, based on the various revealed preference and stated preference methods above, there are a whole range of nonmarket "goods"—ranging from air quality, to recreational parks and lakes and the preservation of the environment generally, to "statistical" lives—that can be quantified in money terms. This raises the obvious question: If these sorts of nonmarket, nonpecuniary goods are monetizable, just what sorts of things is the Biden administration recognizing as *not* monetizable? In other words, what precisely is the significance of language in the MRR Memo that directs the OMB to fully account for all benefits "difficult or impossible to quantify" (recalling, of course, that if something is not quantifiable, it is not monetizable)?

C. Circular A-4's Theoretically Inconsistent Approach to Nonmonetized Goods

To answer this, we can look at the section of Circular A-4 entitled "Benefits, Costs, and Transfers that Are Difficult to Quantify or Monetize." In some cases, the problem is evidently merely one of data collection or measurement. But in other cases, we find that it would simply not be "appropriate" to measure the "monetized value of a benefit or cost . . . through individual choice . . . as measured by WTP and WTA." In what cases? While at pains to say this list is not exclusive, the Circular includes "the value of human dignity, civil rights and liberties, or indigenous cultures" as benefits not appropriately valued through WTP (Circular A-4 2023, 44).

But *why* isn't it appropriate? If, indeed, we all have exogenous preferences, expressed through WTP, for a range of goods not traded on markets (such as environmental preservation), why not for dignity? Or civil rights? Or Indigenous cultures? Could we not conceptualize individual choices expressed

through WTP for each of these? (See, for example, Zerbe (2004, 308), who argues that "all goods should be included in economics analysis for which there is a WTP [including] moral goods.")

Indeed, at least in the case of "dignity," regulatory agencies have done precisely that. For example, in 2010, a Regulatory Impact Analysis (RIA) analyzed a proposed rule by the Department of Justice, pursuant to the ADA, providing for the remodeling of single-user toilets such that wheelchair users can access them without assistance (Department of Justice 2010). However, as discussed by Bayefsky (2014), the RIA determined that the monetized costs of doing so exceeded the monetized benefits by between $2.20 and $5.00 per use (ibid. at 8). If the analysis were left there, any remodeling of the single-use toilet facilities would be unjustified, because the net benefits would be negative. But the RIA acknowledged that the remodeling may also protect against harms to one's *dignity*, and that these harms are not included in the analysis (138). The RIA then goes on to suggest these dignity interests *could be monetizable* by looking at wheelchair users' willingness to pay to avoid similar injuries to their dignity. For example, one could look at the demand by wheelchair users for public transportation when "dial a ride" is available. The assumption is that, although using "dial a ride" would save time, it is nonetheless constitutes a "stigma" (143). This approach also relies on a standard practice of regulatory agencies to find the value of time (that is, the WTP for time) from labor-market data, where the wage is regarded as compensation for the loss of leisure time (ibid. at 47). Hence, regulatory agencies can determine the WTP by wheelchair users to avoid the stigma of assisted transportation by choosing a mode of transportation that requires increased time.

Whatever the merits or flaws of this approach to determining the value of preserving dignity, per the current version of Circular A-4 this sort of analysis would not be recommended. Instead, according to the Circular, a dignity interest should be considered a benefit in *qualitative*, not quantitative, terms. Therefore, it should not be regarded as commensurable (in monetary terms) with all other benefits and costs.

But why? As we saw above, economists and policymakers have never let the creativity of their methods for discerning a WTP for nonmarket goods serve as a deterrent to their implementation. So why not create a method for the divination of a WTP for various forms of dignity?[5]

Similar remarks apply to civil liberties. Take, for example, the right to vote. To date, no regulatory agency has included a WTP for the right to vote for political office in their CBA of a rule. But why not? It's not as though the question has been left entirely unstudied. Chu, Lin, and Tsay (2021), for example, used a travel cost method to determine a willingness to pay to vote. Why not use this research and similar research (see, for example, Dyck and Gimpel 2005) to determine whether efforts by various enforcement agencies to protect voting rights are cost justified?

Consider again the question of the value of life. One could easily claim that life itself—no less than, and arguably more than, dignity, voting rights, and Indigenous cultures—might be just the sort of "moral good" that is not "appropriate" for pricing. Indeed, though the "value of a statistical life"

[5] Kant once drew a hard and fast distinction between that which can be "priced" and that which has "dignity," declaring that "whatever has a price can be replaced by something else as its equivalent" but that "whatever is above all price, and therefore admits of no equivalent, has a dignity" (Kant [1785] 1994, 40). But, as we now see, economists proceed unfazed in the face of such quaint philosophical distinctions. From the neoclassical economist's point of view, it is fundamental to our nature as economic agents that our preferences are expressed by *trade-offs* at definite ratios; hence, for each of us, everything (including dignity) has a price. For the economist, it is simply a question of finding it.

(VSL) method[6] is widely accepted in regulatory law and policy today, it was at one point met with skepticism and even derision. When it was first instituted by the Reagan administration, one economist with the Occupational Safety and Health Administration (OSHA) referred to the method as "ludicrous" in a *Washington Post* interview, and continued:

> Here we are, coming up with unprovable calculations and then citing them as reasons why the public should or should not be protected. It would be laughable, except that human lives are at stake. This is real. (Earley 1985)

The economics discipline has a standard reply to this sort of ethical or moral objection however: a *statistical* life is not the same thing as an *actual* life. Circular A-4 recites this common response, arguing that it would be "erroneous" to suggest that "the monetization exercise [of VSL] tries to place a 'value' on individual lives." Instead, it says, it refers only "to the measurement of willingness to pay for reductions in only small risks of premature death" (2023, 49). Similar comments are repeated elsewhere (see, for example, Colmer 2020; Viscusi 2018, 6–7). But the trouble with this response is that the whole point of a procedure for calculating "statistical lives" based on reductions in mortality risk is to determine the *number of lives that a policy can be expected to save*. Thus, for example, if an agency uses a VSL of $10,000,000, and determines that the total benefit of preserving these "statistical lives" is $100,000,000, that is because it expects that the proposed policy will prevent ten fatalities.

Thus, frequent protestations notwithstanding, the VSL approach, in effect, places a dollar value on life. Granted, it does not pretend to place a value on *particular* lives (as Circular A-4 correctly notes) (2023, 49), but it nonetheless determines dollar values for lives *generally*. Thus, while the methodological move of finding a dollar value for expected deaths using the dollar value of lower mortality risk is certainly a creative one, and while it may *seem* to successfully circumvent the problem of valuing lives, that success is illusory.

We are left without a clear, theoretically consistent foundation for determining what sorts of goods can or should be "monetized," and which should not. Dignity and civil rights are exempted in the Circular from monetization, presumably on moral or ethical grounds (even though economists have alighted on methods to discern a "willingness to pay" for these goods), and reduced fatalities *are* included as monetizable (as is part of standard CBA practice, via use of the VSL method), even though, if anything, the question of life has as least as much of a claim to be exempt from monetization under CBA.

III. The Ontology of the Neoclassical Subject and the Implicit Values of CBA

This inconsistency, I argue, results from insufficient theoretical self-awareness of the neoclassical picture of the subject on which the practice rests. This subject, as I elaborate on further below, is typically *naturalized*. That is, it is typically taken to be a natural, and hence inexorable, given. Another way of saying this is that it is not only the subject's preferences that are regarded as exogenous in the standard CBA approach, but the subject himself.[7] This in turn implies that CBA privileges the values of this imagined exogenous subject, failing to consider how individuals might have alternative modes

[6] See discussion above at II-B, p 81.

[7] See note 1 above.

of valuation that are *endogenous* to the institutional context. As will be discussed further below, the neoclassical subject serving as the foundation for CBA is typically represented as having self-interested preferences for goods, expressed and expressible in terms of their rates of substitution, or commensurability, with other goods. This subject, precisely because it is uncritically treated as natural, is regarded as ontologically prior to the market. Under this view, market data are evidence of the desires of this subject, and the challenge is merely to find other kinds of evidence where market data are not readily available. But if we regard this subject as *endogenous* to the market, then we might be able to imagine other sorts of subjectivities, with differing modes of valuation, endogenous to other institutional contexts, including the context of democratically constructed institutions. I return to the question of democratic institutions in Part IV.

A. Circular A-4 and Alternative Modes of Valuation

First, we may briefly ask, just what sorts of alternative pictures of the human subject are possible, apart from that which CBA is implicitly predicated on? Consider again the question of life and death. To the extent that life has weight at all in policy matters, it is often precisely because it is valued in ways at odds with those supposed by CBA. First, life may have value as an *ethical* matter. If so, one must value not only one's own life, but also the lives of others (Ackerman and Heinzerling 2005).[8] Second, we may choose to express life's value not in terms of its exchangeability or commensurability, but in terms of its *incommensurability*. Its value therefore could not be identified in terms of a WTP, but only in terms of its pricelessness. Or, put otherwise, it is valuable only insofar as it is invaluable. Value, in this sense, might be expressed in terms of rights or obligations, and not in terms of exchangeability. From this perspective, the question of "value" can be conceptualized not only in utilitarian terms, but in deontological terms (O'Neill and Spash 2000; Kant [1785] 1994). Finally, the very fact that certain values are properly understood either in ethical terms, or in terms of rights, may suggest that the language of "preferences" is insufficient to capture them. Sunstein, for example, has argued (in at least one essay) that "in normative work, the idea of 'preferences' elides morally important distinctions among the motivations and mental states of human agents," and thus, "for many purposes, it would even be best to dispense with the idea of 'preferences'" (Sunstein 1996, 910).[9] Other authors have, similarly, suggested that a distinction be made between simple "tastes," which are matters of pure subjective opinion, and *judgments*, which involve reasoned consideration and are subject to revision upon reflection (see, for example, O'Neill and Spash 2000; Sagoff 2007).

These observations easily apply to matters such as dignity, civil rights, and the rights of Indigenous communities, which may well explain the attempt to mark out a separate space for them in the Circular. But if dignity and civil rights can arguably be removed from the scope of CBA, then why not matters of life and death? Why try to decide that one can find the "correct" or "accurate" monetary benefit of lives saved by looking for a purported WTP for mortality risk reduction? For that matter, the above-described alternative notions of valuation are arguably applicable to a whole host of nonmarket "goods," including favorable air quality, good health, and the preservation of our natural environment generally. And yet, as we saw above, these are just the sort of goods that the Biden administration,

[8] As discussed below, CBA increasingly considers the possibility of other-regarding preferences. However, it fails to consider how the question of whether we act in our own self-interest or the interest of others may *itself* be endogenously constructed. Hence, it typically marginalizes the possibility of altruistic preferences, and privileges self-interested ones. See section II-D.

[9] The case of Sunstein is a curious one. For someone so aware of the difficulties inherent in using the idea of "preferences" in an oversimplified manner, he is often remarkably sanguine about the use of CBA. The complexities of Sunstein, and the varying shifts in his work, are, however, not addressed in this article.

following standard CBA practice, regarded as perfectly amenable to monetization through discernment of WTP.

B. Historical Roots of the Naturalized Neoclassical Subject

The absence of an articulated theoretical grounding for the distinction between what is or is not monetizable thus appears to reflect both an implicit underlying naturalization of the neoclassical subject and the beginnings of a (similarly implicit and unarticulated) awareness that the fundamentally value-laden character of the policy questions at issue render that naturalization suspect. What is needed is a conscious rejection of this naturalization of the subject in order for the practice of policymaking to free itself from the CBA straitjacket.

These tendencies toward naturalization do not, of course, begin in the policy world. They are deeply embedded in the history of economic thought. Along with empirical evidence contradicting the neoclassical picture of the self (discussed in Part III-D), an examination of the historical roots of the naturalized neoclassical subject may provide the critical distance necessary for the release of its near-intractable grip on the policy sphere.

1. The Jevonian Naturalization of the Subject

The brief history of the naturalized neoclassical subject that I recount here focuses primarily on the contributions of William Stanley Jevons. This is because, among the seminal thinkers contributing to the development of neoclassical economics, he was perhaps the one most interested in the inner workings of the economic subject. In particular, we see in Jevons's texts the familiar assumptions about individuals that we find in standard neoclassical texts today: that we are self-interested utility maximizers, and that the manner in which we maximize utility is through the exchange of goods with other individuals. Indeed, Jevons described his project as the study of the "mechanics of utility and self-interest," where these mechanics are properly understood in terms of the "laws of exchange" (Jevons 1871, viii).

Jevons viewed these properties of individuals in fundamentally naturalist terms. This is true in two senses of the word. First, he consciously and explicitly modeled his project on the dominant natural science of his time, rational mechanics. Hence, his decision to refer to his project as the "mechanics" of utility was no accidental metaphor, but rather a clear statement that his own science of economics not only could be *formally modeled* on the natural sciences, but had something in common with it *substantively*. Just as "all the physical sciences have their basis . . . in the general principles of mechanics," claimed Jevons, so too does his nascent science of economics have its basis in the principles of the mechanics of utility and self-interest (Jevons 1871, xvi–xvii).

The prime example of this commonality of mechanical principles was what Jevons found to be an uncanny similarity between the "laws of exchange" and physical mechanics. As a formal matter, the relationship of utility to exchange was mathematically analogous to the relationship of energy to mechanical motion. Thus, just as energy drove the workings of energy, individual utility drove the mechanics of exchange (Jevons 1871, viii, 102; Wulwick 1990).

Hence, if we want to understand exchange in the market, we need to understand the phenomenon of utility maximization. Such an understanding required a naturalization of Jevons's economic science in

a second sense: interpreting the process of utility maximization in terms of the psychological and physiological experiences of the individual. Jevons adopted a Benthamite view of persons, according to which pleasure and pain were the two "sovereign masters" to which we are all subject. Under this view, we are all ultimately stimulus-response mechanisms, responding favorably to pleasure and unfavorably to pain (Jevons 1871, 10–11; Bentham [1789] 2007).

Thus, for Jevons, the behavior of the individual economic subject is best explained in terms of how the "degrees of . . . sensation" of pleasure and pain change within us as we engage in economic activity, including consumption and labor. Thus, it is the fundamentally *natural facts* of human psychology, and the mechanistic laws that govern it, that constitute the ultimate ground of the science of economics (see, for example, White 1994).

Further, Jevons's explicit decision to frame his nascent economics in the language of mechanics confers on his project all the legitimacy of a *science* (rather than a political project). As Wulwick noted, in order to "convince readers and critics that his economics was scientific, he would show that economics was like physics, in particular, rational mechanics" (1990, 219). Indeed, our very use of the term *economics* can be credited in large part to Jevons's quest for intellectual legitimation. Making plain his feelings about the prevailing term "Political Economy," he wrote: "I cannot help thinking that it would be well to discard, as quickly as possible, the old troublesome double-worded name of our Science" (Jevons 1871, xiv). The term "economics," in his view, was not nearly as troublesome. It had the virtue of being similar in form to "mathematics . . . and the names of various other branches of knowledge" and thus was an appropriate way to christen Jevons's nascent science.

2. Post-Jevonian Developments

Since Jevons and other first-generation neoclassical thinkers, the field of neoclassical economics has amended and elaborated on the Jevonian picture of the economic subject. Among other things, Jevons did not use the language of "preferences." The discipline would not see the appearance of that language until the early twentieth century. The precise relationship between the notion of preferences and utility has been, over the course of the twentieth century, a matter of considerable dispute, with, at times, calls by some of the most eminent economists to banish the notion of utility altogether (Samuelson 1938).[10] Contemporary neoclassical thought is often represented as having settled the matter by regarding utility functions as nothing more than analytical tools for ordinally representing preferences (Varian 2020, 55). This representation is, however, less than entirely forthright, since it is not uncommon for economists to refer to "gaining" or "losing" utility (see, for example, Tesar 1995; Just and Peterson 2003), suggesting that utility is not merely a formal way of representing preferences, but a synonym for the satisfaction or pleasure derived from *meeting* those preferences. Indeed, some economists have argued forthrightly for a return to the more "hedonistic" notion of utility, and not exclusively as an analytical marker of desire.[11]

[10] This impulse was driven largely by worries of behaviorist and positivist tendencies to purge economics of unfortunate "unobservables," like inner mental states (Madra 2016, 53).

[11] These economists, however, tend to fall more in the behaviorist camp, rather than in the neoclassical school. Such an approach has the virtue of opening up empirical investigation into whether choices made by individual agents are genuinely welfare improving at the psychological level (Kahneman et al. 1997), rather than defaulting to the standard neoclassical logic that voluntary individual choices must be welfare improving, otherwise the choices would not have been made.

Regardless of whether it is simply preferences or the utility derived therefrom, neoclassical economics has never abandoned the Jevonian notion that the fundamental explanation for the outward behavior of exchange is something in the mind. Nor has it rejected the assumption that these preferences, or the resulting utility-maximizing behavior, are motivated fundamentally by self-interest. In short, the exogeneity of the self-interested subject and their preferences remains a core tenet of the theoretical picture. Exchange behavior in the market is a result of this subject, not its cause.

Thus, even if the language of naturalization is not as explicit and all-pervasive as it appears in Jevons's texts, it has no less of an effect. Indeed, if anything, post-Jevonian developments have solidified this naturalistic picture, by holding that all economic subjects have—again, prior to their appearance or behavior in a market—a rate of substitution between goods (Hicks 1946, 20). The analytic construction of utility functions to represent preferences formally implies that each individual has definitive rates at which they would exchange good A for good B. Thus, the very nature of preferences as understood by neoclassical economics implies that those preferences *must* find their expression *in the act of exchange*. The market is thus the *ideal expression* of a certain kind of naturally constituted subject. Whatever the theoretical insufficiencies of Jevons's initial texts, his basic project of explaining the phenomena of exchange by reference to the already extant, naturally constituted economic subject has thereby borne fruit, and occupies central stage in current neoclassical discourse.

The notion of a WTP is directly traceable to this naturalized view of the subject with self-interested preferences that are expressed fundamentally in terms rates of substitution (or exchange). Place that subject into a monetized market economy, and the rate of substitution manifests as a maximum willingness to pay for a good in monetary terms. It is for this reason that that WTP is regarded as the proper measure of a good's "benefit": It is the external expression of the internal value placed on it by the individual economic subject, as determined by their rate of substitution in monetary terms.

Hence, there could be no CBA (as currently constructed and practiced) without the Jevonian, neoclassical picture of the subject. A rejection of that picture thus implies an imperiled ontological foundation for CBA, since the economic subject on which CBA relies would not exist.

C. The Role of the Neoclassical Subject in Welfare Economics Justifications for CBA

Below, I examine evidence supporting the claim that this subject is a work of fiction. First, however, it is necessary to examine the relationship between the neoclassical subject and its standard justification in terms of welfare economics.

1. CBA and Welfare Economics Logic

The welfare economics justification for CBA is typically cast in terms of *Pareto efficiency* and *potential Pareto efficiency* (or, alternatively, Kaldor–Hicks efficiency). The former is defined as describing a state where no individual actor could be made better off without someone else being made worse off. The latter is defined as a state where, while some actors may have been made better off and some worse off, the former *could* compensate the latter (even if they do not) (Boardman et al. 2018, 28–30; Nas 2018, 16). To fully appreciate a normative defense of CBA in these terms, we must first understand their role in the neoclassical justification for markets.

According to standard neoclassical theory, a perfectly competitive market in particular goods yields an equilibrium quantity that maximizes its net benefit to society in dollar terms.[12] If the good were produced in any quantity *less* than that at equilibrium, marginal benefit would be greater than marginal cost, and additional net benefit to society could be obtained by increased production. If the good were produced in any quantity *greater* than that at equilibrium, marginal benefit would be less than marginal cost, and additional net benefit could be obtained by decreasing production. It is only at the equilibrium point that net benefit is maximized (Boardman et al. 2018, 64; Nas 2018, 790).

Essential to this logic is that benefits and costs are defined just as we saw them described in Circular A-4—that is, in terms of WTP or WTA (Heijman 1998, 51; Mishan 1988, 4). Thus, to say that marginal benefit is greater than marginal cost is to say that there are buyers who are willing to pay more than sellers are willing to accept. Therefore, trades will occur. If marginal cost is greater than marginal benefit, this is equivalent to saying that buyers are not willing to pay as much as sellers require, and therefore there is no room for a deal. Hence, there are no further deals—that is, we reach equilibrium—only where marginal WTP equals marginal WTA. It follows that it is only at the equilibrium point that that the Pareto criterion is satisfied. Based on their respective WTP and WTA, at any quantity lower than the equilibrium quantity, buyers and sellers could both be made "better off" by engaging in trade, whereas, at any quantity greater than equilibrium, buyers could not be made better off without sellers being made worse off (Nas 2018, 29–31).

Hence, if all goods could be produced and allocated via markets, and all markets functioned perfectly, net social welfare would be maximized and the result would be Pareto optimal. Indeed, on this view, it is possible to argue that no government regulatory mechanism would be needed at all. But in cases of market failure, a nonmarket mechanism is required to maximize net social benefits. The use of CBA in regulatory law functions as that mechanism (Nas 2018, 4).

However, while CBA replicates the outcome of competitive markets insofar as it maximizes net social benefits, it is *not* necessarily the case that it would make no one worse off. As with the market, CBA maximizes net benefits where benefit is defined in terms of WTP. But, unlike the market, nothing about the implementation of CBA-based policy requires that those who are *willing* to pay for a benefit *actually* pay, nor that those who lose a benefit are actually compensated for the loss. Hence, CBA-based policy leads to both "winners" and "losers." At the same time, because the "winners" could *potentially* compensate the losers and still gain from the policy, CBA is said to satisfy the criterion for *potential* Pareto efficiency (Mishan 1988, 4; Acland 2022, 34–35).

2. Efficiency and the Individual Economic Subject

Observe that the standard justification of CBA in terms of potential Pareto efficiency is tied to the fundamental concepts of WTP and WTA. Thus, the normative logic of CBA, in addition to being cast in the welfarist language of Pareto and potential Pareto improvements, can also be cast in the terms of deference to, or respect for, *the desires of the individual subject*, in precisely the Jevonian, neoclassical sense described above. Thus, one can argue that the welfarist, efficiency-based defense of CBA is inextricably linked to the normative stance of deferring to that subject's individual autonomy (Gillroy

[12] For simplicity, the analysis presented here regarding the welfare-maximizing properties of the market is in standard Marshallian, partial-equilibrium terms. In the general-equilibrium context, where interactions between markets must be taken into account, the existence of a unique, stable equilibrium is by no means guaranteed (see, for example, Keen 2011, 53–57).

1992). Circular A-4 similarly acknowledges the normative import of CBA in this way, saying that "WTP or WTA as the measure of value implies that individual preferences of the affected population should be *a guiding principle* in the regulatory analysis" (2023, 30, emphasis added).

The normative lodestone of CBA can thus ultimately be understood in terms of the attempt to reconcile the desires of disparate individuals *within* society with an outcome that is optimal for society *as a whole*. Indeed, this attempt to reconcile, or harmonize, social ideals with the desires of individuals is sometimes understood as one the of the defining features of all neoclassical thought (Wolff and Resnick 2012; DeMartino 2000), with one author referring to it as the central "problematic" through which neoclassical thought can be understood across its varying manifestations at different historical periods (Madra 2016, 37–38). The central role of CBA in the policy space can be understood as another manifestation of this essential problematic of neoclassical thought: CBA (like the market itself) produces a "socially optimal" outcome that is consistent with the ideal of deference to the desires of the neoclassical subject.

D. A Non-Neoclassical Endogenous Subject: Other-Regarding Desires

However, as we saw, this notion of deference to the desires of this subject implicitly represents that subject as though it were a kind of natural given. If this picture is challenged, we suggested, the possibility arises for an *alternative* picture of the subject, one that is endogenous to the social and institutional context. In what ways might our subjective selves, and accompanying modes of valuation, differ? As indicated above, such differences might include valuing goods as rights (as opposed to tradeable commodities); acting not only on our preferences but on our judgments (understood in terms of valuation founded on reasoned consideration); and valuations that are other-regarding or altruistic, as opposed to simply self-regarding. I focus here on experimental evidence for the endogenous construction of other-regarding valuations.[13]

To be sure, it would be a caricature of the economics profession to suggest that none of its members are aware of the possibility of regard for the well-being of others. Indeed, Jevons himself was at pains to insist on this essential aspect of ourselves, and on the existence of a "moral science" of ethics more generally (Jevons 1871, 27). Using his own Benthamite terminology, Jevons acknowledged that one could very well imagine ethical, other-regarding behavior as being motivated by "pleasure." However, this would be a "higher" sort of pleasure than that driven exclusively by self-regarding motives. Thus, according to Jevons, there is a "hierarchy of feeling," where the highest rank concerns duties toward others, and the lowest rank concerns the satisfaction of our own individual needs (Jevons 1871, 27). But, according to Jevons, nothing about the presence of this hierarchy undermines his project of studying precisely, and exclusively, that "lowest rank" (ibid. at 27). It is this study—that is, the study of the "mechanics of utility and self-interest" in the world of exchange—that Jevons calls "economics" (21–22). Thus, questions that might properly fall within the province of the "moral science" of ethics

[13] Scholarship and experimental evidence is also suggestive that the extent to which individuals regard themselves as having a *right* to certain goods may also be endogenous. For example, viewing goods as "rights" may be endogenous to whether such a right is formally recognized in law, or to simple possession of the good in the first instance (Kelman 1978). One complication, however, is that viewing a good as a right may not necessarily make the good entirely *invaluable* in the sense of nonexchangeable or priceless. That is, individuals may still be willing to place it up for sale; but the economic value they attach to it might be vastly increased if they view themselves as giving up a right, as opposed to selling a commodity on the market (Kahneman et al. 1991, 202–04). This further implies that there may be stark differences between WTP and WTA (Robinson and Hammitt 2011, 11). For purposes of the present article, however, I leave these issues aside.

are left to the side by economists, not because they do not exist, or are not important, but simply because they are not economists' concern.

Notice, however, that nothing in Jevons's acknowledgment of the existence of ethical motivations (whether properly conceptualized in Benthamite terms or not) contemplates the possibility that the sphere of exchange may not merely *reflect* or *be caused by* the individual mechanics of utility and self-interest, but that it may also *facilitate* that very "lowest rank" of self-interested utility maximization, which, for Jevons, has no prior cause other than nature itself. That is, for the science of Jevonian economics, simply abstracting away the "higher rank" of the calculus of utility in order to focus on that lower rank is a self-evident and unproblematic procedure. Such is the effect of the Jevonian naturalization of the subject as exogenously given.

This assumption that ethical or other-regarding motives can be abstracted away without consequence for the field of study of "economics" is a near-constant assumption not just in neoclassical economics, but also in the classical political economy tradition. John Stuart Mill, for example, addressed the question of the complexity of motives of the human subject and its bearing on the (then-named) science of Political Economy. Such complexity, he said, did not undermine the possibility of a political economy that would address only our "desires to possess wealth" and its effects in markets, since all we need do is "make entire abstraction of every other motivation" (Mill [1836] 2007). Thus Mill, like Jevons after him, failed to consider how the institutionalization of markets themselves, rather than simply *resulting* from, or *reflecting* that desire, might facilitate or encourage it.

Because the failure to appreciate the possibility of the endogeneity of the subject is as reliably present in contemporary mainstream economics as it has been historically, we similarly find that failure exhibited in Circular A-4. To be sure, the Circular recognizes the possibility that individuals do not always act out of self-interest, and instead might exhibit altruism for the health or "welfare of others" (2023, 34). Accordingly, individuals might have a WTP to improve the well-being of others (or a WTA to permit harm to others). But the Circular's acknowledgment of altruism is brief and insufficient. For one thing, it appears to dismiss the problem hastily by arguing that in its "pure" form, altruism would cause individuals to add to individual dollar valuations the exact same dollar valuations held by others. Therefore, while it would scale upward both total costs and benefits, it would have no effect on a net benefit analysis, and can thus be safely ignored. To be sure, the Circular goes on to acknowledge that the degree of altruism might vary depending on, say, the person affected (for example, individuals might be more altruistic toward the poor than the rich), and that cases such as these would indeed have implications for CBA. But, apart from never pausing to consider that this so-called "paternalistic" form of altruism might be more prevalent than the "pure" kind,[14] and hence have nontrivial effects on CBA, Circular A-4 simply never considers how concern for the well-being of others might be endogenous, as opposed to a mere "given" to be discovered through the purportedly value-free methods of economic science.

The possibility of altruism or other-regarding behavior as endogenously constructed, however, has significant support in the literature in behavioral and experimental economics. One oft-cited study concerns an experiment in day care facilities in Haifa, Israel (Gneezy and Rustichini 2000a). A common occurrence in such facilities is that parents arrive late to pick up their children. In this experiment, researchers imposed a fine on the late-arriving parents. Since the fine increases the cost

[14] Robinson and Hammitt (2011, 26) define "paternalistic altruism" in terms of weighting another person's costs and benefits differently than they themselves do, under the usual willingness-to-pay standard.

of arriving late, bread-and-butter economic principles would predict a decrease in those late arrivals. Increase the price of any good, and you decrease the quantity demanded. Surprisingly, however, the rate of late arrivals *increased* compared to the pre-fine period. Furthermore, once the fine was removed, late arrivals did not return to their pre-fine period levels (ibid. at 8).

Understanding such seemingly counterintuitive results depends on first asking why there were any timely pickups of children in the absence of a fine. On one interpretation, this behavior is accounted for in terms of the *implicit understandings* between the day care staff or teachers and parents. More specifically, in the absence of a fine, the implicit understanding appeared to be that the parents had an "ethical obligation to avoid inconveniencing the teachers" (Bowles 2016, 4–5). The institution of the fine did something other than simply create a monetary incentive: It sent a *signal*. It signaled that the relationship was no longer one defined in terms of ethical obligations, but rather in terms of exchange. That is, the fine signaled that later pick-ups were now *for sale*. Thus, the institution of a fine *commodified* a good whose quantity demanded was otherwise governed by social and ethical norms, rather than the norms of a market. Put otherwise, the implicit institutionalization of an exchange relation occasioned a shift in the parents' subjectivity. Formerly valuing the issue of timeliness in terms of ethical relations toward others, they now valued it purely in terms of self-interest. Hence, exchange relations did not simply "reveal" an already existing set of preferences. Instead, they shifted the entire mode of valuation.

A similar experiment was conducted involving high school students going door-to-door raising money for charitable causes (Gneezy and Rustichini 2000b). One group of students was given a motivational talk beforehand, emphasizing the importance of donations. Another group was given the exact same talk, but also received a promise of 1 percent of donations. A third group was given the exact same talk and a promise of 10 percent of the donations. (The students were informed that these payments would not come out of the donations themselves, but out of additional funds.) If the Jevonian notion that ethical motivations could be bracketed, and analyzed separately from, "the mechanics of utility and self-interest" as manifest in the sphere of exchange, then the presence of exchange relations should have no effect on any such ethical motivations. Indeed, we might reasonably expect that if an individual is motivated by altruism, then offering something in exchange for their behavior should simply produce an additional motivation, and thereby lead to *more* of the previous altruistically motivated behavior. Two motivations should be better than one.

But that was not the result of the experiment. Instead, the students that raised the most money on average were those who *only* received the motivational speech, without any monetary compensation. Students that received 10 percent of the donations in monetary compensation in addition to the speech raised less. Students that received 1 percent in compensation raised the least (Gneezy and Rustichini 2000b, 799–800). It appears that we cannot treat self-interested and other-regarding behavior as simply "separable" (Bowles and Polania-Reyes 2012, 370); that is, we cannot assume that the two motivations can simply be added together. Instead, it appears that the offer of something in exchange for the labor of raising donations at least to some degree *displaced* the otherwise existing altruistic motivations. Thus, the offer of a material reward had the effect of crowding out the otherwise salient other-regarding behavior. Thus, in Bowles's terms, the salience of self-interested as opposed to other-regarding behavior is itself a function of the "situation" (what I have been referring to as the institutional context) (Bowles 2016, 47).

In addition to "crowding out" other-regarding behavior, material rewards or penalties might, under some circumstances, crowd *in* such behavior. For example, in Ireland a 33-cent tax was imposed on

each use of a plastic bag at the cash register (Bowles 2016, 202). If the "crowding out" story always held true, we might expect a similar result as we saw in the case of the day care centers in Haifa: We might expect to see individuals treat the tax as a simple fee, and pay that fee for the privilege of using plastic bags. Instead, this relatively small tax caused plastic bag use to decline—by as much as 94 percent. It thus may well have been the case that the small tax on plastic bag use *facilitated* or *strengthened* altruistic behaviors (ibid. at 202–03).

Why would the introduction of a material penalty under some cases appear to crowd out other-regarding or altruistic behaviors, while in other circumstances crowding them in? We already suggested an answer in noting that the day care center fine, instead of just creating a material penalty, also sent a signal that concerns regarding ethical obligations were not part of the relevant social relations. But what if the material penalty could send a different signal? What if it could be communicated not simply as a fee or price, but as a kind of *moral sanction*? In that case, the real salience of the penalty would not be the material loss itself, but the communication of a social norm. This suggests that perhaps more significant than the material effect (whether penalty or reward) is the social context in which that effect is situated. For example, the plastic bag tax was accompanied by public messaging regarding the considerable harms done by plastic to the environment (Bowles 2016, 203). The meaning of the tax, then, appeared to cause the drop in use. *The New York Times* interviewed an Irish citizen regarding plastic bag use. "The tax is not so much, but it completely changed a very bad habit," he said. "Now you never see plastic" (Rosenthal 2008).[15]

Indeed, the fact that the "crowding in" of an other-regarding subjectivity can occur depending on how social facts are viewed or interpreted suggests that the displacement of one sort of subjectivity through a shift in the institutional context depends not only on the context itself, but also on how it is *framed*. (Or, otherwise put, the context includes the framing.) One noteworthy experiment highlighting the significance of framing involved a repeated prisoner's dilemma game (Liberman et al. 2004). In the familiar setup of the game, players choose to either "defect" or "cooperate" for each of *n* rounds. The "dilemma" posed by the game is that each player's dominant strategy for each round is to defect, and yet if each player follows this strategy, their payoff is lower than the payoff that would result if they both cooperated. The "framing" experiment adhered to the usual setup of the game, but simply labeled the game differently for different participants. For half the participants, the label given was "The Wall Street Game." For the other half, the label was "The Community Game" (ibid. at 1176). Experimenters found that the name of the game was highly predictive of participant decisions to either cooperate or defect, both on the first round of the game and during the game overall. In addition, the labeling was significantly more predictive of cooperative/defecting behavior than were the predictions of other individuals who knew the players by personal reputation (1177).

Notably, Circular A-4 does briefly acknowledge that individual decisions are influenced by framing effects (2023, 19). However, it entertains no discussion of the connection between these effects and altruistic behavior. Even more significantly, it avoids the difficult question of the implication of such effects for a person's "true" exogenously given preferences, the existence of which CBA assumes. Rather cavalierly, the Circular suggests that regulators attempt to distinguish between "rational"

[15] Bowles (2016) discusses other instances of material incentives complementing (in other words, crowding in), rather than substituting for (crowding out) other-regarding desires. For example, Galbiati and Vertova (2014) found that, in a public goods game, small nonbinding incentives increased players' contribution to a public good, but larger nonbinding incentives did not increase contributions. As such, the material incentive appeared to be a signal that complemented players' sense of obligation to contribute.

preferences and those affected by "behavioral bias" (19) without exploring what kinds of behaviors are sufficiently "biased" to override the usual presumptions (1) that behavior reveals preference, (2) that expressed preferences reflect an individual's assessment of their own well-being, and (3) that such assessments ought to be respected. Indeed, the citation Circular A-4 uses to support the contention that such "biases" ought to be taken into account is far more cognizant of these "thorny philosophical issues" than is the Circular itself (Robinson and Hammitt 2011, 8).

Hence, it is insufficient for purposes of CBA to simply recognize that human beings engage in altruistic behavior. The more relevant question is what institutional, situational, or framing contexts might facilitate, or discourage, such behavior. Absent that inquiry, CBA will continue to proceed on the suspect notion that the degree of altruism, or lack thereof, is a kind of natural given, and that relations can be used to infer preferences without considering whether the very presence of those relations affects the kinds of valuation (whether other- or self-regarding) that individuals express.

IV. Democracy and the Endogenously Shaped Subject

As suggested above, if the requisite ontological foundation for the CBA subject is absent, then so too is the normative foundation. Hence, the enterprise is without merit. What, then, can take its place?

An answer can be gleaned from the idea that forms of valuation by the human subject are institutionally dependent, and from the goal inherent in neoclassical welfare economics itself of constructing an optimal outcome for society that is consistent with individual preferences. If individual preferences are not natural, exogenous givens, then the reconciliation of a social optimum with individual preferences cannot rest on a simple aggregation of those preferences. Instead, it must rest on a *socially informed* construction of those preferences consistent with shared normative principles for achieving a social good. In a democratic society, one such bedrock normative principle is democracy itself.

A. Democratic Contexts and Alternative Ways of Valuing

It is precisely in democratic contexts where we are likely to see alternative non-Jevonian subjectivities and modes of valuation emerge. In particular, it is in such contexts where we might expect to see modes of valuation that are other-regarding and/or rights or obligations based (see, for example, Anderson 1990). Democratic contexts might also facilitate valuations in the form of *judgments*, which must be justified with reasons, as opposed to simple "tastes." Scholars from diverse perspectives have converged on the idea that our valuations in our capacity as private agents in a market may be quite different from those in our capacity as members of a polity. Because I have explored that literature elsewhere (Silverman 2024), an extensive review of it is not needed here. Kelman, however, nicely summarizes the issue by arguing that, in using WTP figures involving private transactions "to provide guidance for public decisions, [economists] assume no difference between how people value certain things in private individual transactions and how they would wish those same things to be valued in public collective decisions" (Kelman 1981, 38). Thus, this ontological assumption about the *nature of persons* thus becomes an *implicit value judgment* that the desires of the naturalized Jevonian subject are the *only* kinds of desires that can and *should* count for policy purposes:

> In making such assumptions, economists insidiously slip into their analysis an important and controversial value judgment . . . namely, the view that there should be no difference between

> private behavior and the behavior we display in public social life. An alternative view—one that enjoys, I would suggest, wide resonance among citizens—would be that public, social decisions provide an opportunity to give certain things a higher valuation than we choose, for one reason or another, to [give] them in our private activities.[16] (Kelman 1981, 38)

Put otherwise, the entire normative justification for CBA discussed above, which rests on an attempt to "harmonize" the desires of discrete individual subjects with the need for a "socially optimal" state, depends on one very particular, value-laden kind of harmonization. Ignored, or simply not contemplated, is the possibility of social harmonization through valuations facilitated and elicited through democratic processes.

As for why a democratic context should change the nature of our valuations, Richardson (2000) persuasively points to the role of *deliberation*. Democratic deliberation facilitates the practice of *articulating reasons* to justify one's valuations, thus expressing them as *judgments*, and not simply "tastes." Indeed, even in the entirely individual context, the usual preference-based neoclassical model inadequately represents the individual subject, says Richardson, because individuals not only decide on ends, but on *means* to various ends. The process by which means are evaluated in light of various ends is continually updated in light of new information and experience. Further, based on the adequacy of available means, ends themselves may be reevaluated. This process of a more "complete thinking" through of means and ends is something Richardson calls "practical intelligence" (ibid. at 983), and its very existence is denied or ignored by the usual "preference"-based picture of the subject. Moreover, public deliberation allows individuals to exercise their practical intelligence regarding public goals and values. Individuals simply cannot have "completely thought through" preferences regarding public matters without a process of "collective deliberation" (977n13).[17]

Hence, while the Jevonian subject may be the product of market institutions, a non-Jevonian subject—whose valuations are other-regarding, rights/obligations based, and expressed in the form of reason-based judgments—might reveal itself in democratic institutions. The relevant policy question therefore cannot be, How do we best discern the subject's exogenous preferences? Rather, the question is, Which sort of value-eliciting institutional contexts do we regard as more appropriate when crafting policy intended to improve overall social welfare—democratic institutional contexts, or market-based ones?

B. Theories of a Democratized Regulatory State

The claim that democratic processes are arguably a more legitimate ground for administrative rulemaking than is CBA may quite reasonably invite the question of just what sort of democratic processes administrative agencies should follow. Very broadly speaking, I argue that the choices are at least two. The first is to operate within the statutory authority granted to agencies by Congress. The

[16] Similarly, Sunstein has argued that it would be better to think of preferences as "constructed" by social situations, rather than "elicited," and suggested that there is therefore no good reason to think of "consumer behavior" as being a more "realistic" reflection of "actual" preferences than is "political behavior" (Sunstein 1996, 916).

[17] Indeed, the notion not only that democratic institutions might facilitate non-neoclassical subjectivities, but that the construction of any individual subjectivity only arises in some social context is a recurring and pervasive theme in several philosophical traditions. Wittgenstein, for example, argues that the very practice and even capacity of the individual to engage in a practice of reasoning in the first instance is a function of a "language-game"—a set of social practices that give meaning to, and hence enable in the first place, the entire business of setting out grounds for a belief (Wittgenstein 1953).

second is to reform regulatory agencies themselves as loci of public participation and democratic deliberation.

The first option is (or at least should be) uncontroversial. Agencies are creatures of federal statutes, and the rules they create and decisions they make are pursuant to specific statutory schemes. They are obliged, therefore, to follow the relevant statutory terms. This is typically justified in terms of Congress's acknowledged role in democratically representing voter preferences.[18]

But the notion that agencies can seamlessly receive and adopt voter preferences as codified in federal statutes—what has sometimes been referred to as the "transmission belt" model, on the theory that Congress simply codifies and then "transmits" voter preferences to agencies, who then in turn codify them in regulations and rulemaking (Stewart 1975, 1675; Seidenfeld 1992, 1516; Walters 2022)—is not unproblematic. First, as Seidenfeld (1992) argues, congressional lawmaking can be "overresponsive . . . to powerful factions that exercise undue influence over politics" (1541). But even if we could put aside the question of "undue influence" in Congress, it remains the case that federal statutes leave open a considerable degree of discretion on the part of regulatory agencies, sometimes with that grant of discretion explicitly stated, and often simply by leaving essential terms open to interpretation. There is therefore often an absence of a clear statutory directive to "transmit."[19]

This agency discretion is often justified on the grounds of agency scientific or technical expertise that is unavailable to members of Congress. No doubt, agencies have certain kinds of technical expertise that Congress does not.[20] However, it is rarely the case that agencies can take up statutory interpretive slack through expertise alone. Rather, agencies are still left with policy determinations, which invariably must be informed by normative considerations. As Seidenfeld (1992) puts it, while "technical assessments help identify the set of possible choices the agency faces and often elucidate the implications of those choices . . . when all is said and done . . . expertise rarely eliminates the need for the agency to *choose among competing values* . . . a choice that is the essence of political decisionmaking" (1519–20, emphasis added). If, for example, Congress directs the FCC to regulate airwaves in the public interest, the FCC cannot decide how to fulfill this mandate based on its "expertise" alone. It has a policy choice to make (which involves, for example, adopting something like the "fairness doctrine" or, in the alternative, adopting "a more laissez faire approach") (ibid. at 1520). Similarly, if OSHA is directed to prevent the "material impairment of health or functional capacity," or if the FCC

[18] See, for example, Driesen (2005a, 3), arguing that where Congress directs an agency to follow a "feasibility" standard in protecting health or well-being, this represents a "key democratic decision" that the agency is obligated to follow. See also Frankfurter (1947, 533), noting the obligation of courts not to usurp the power of the legislature as "lodged" in it by "our democracy"; and Breyer (2002, 266), arguing that judges should be reminded that the law's "democratic source" resides in Congress. The Supreme Court's recent decision in *Loper Bright Enterprises v. Raimondo*, 602 U.S. 369 (2024), overruling the precedent of *Chevron* deference to agency interpretation of statutes, similarly buttresses this option, insofar as it emphasizes the obligation of agencies to follow statutory directives.

[19] In the wake of *Loper Bright*, however, courts will be less likely to find "discretion" on the part of an agency. On the contrary, the Court held that even when a statute is ambiguous, it nonetheless has a "fixed" "single, best meaning." *Loper Bright*, 602 U.S. at 399. As Kagan's dissent observes, this notion is, at best, suspect. See note 21 below. Regardless, the *Loper Bright* framework now gives courts explicit authority to review agency interpretations *de novo*, and strike them down if they are found to deviate from the "best" meaning.

[20] For the reasons stated above, I am *not* including CBA within this sort of "scientific" expertise.

is directed to provide for "substantial restoration of the natural quiet,"[21] these questions cannot be answered through scientific expertise alone, but require normatively informed policy judgments.

Given this irreducible element of "political decisionmaking" by agencies, Seidenfeld draws on theories of civic republicanism to argue that we should look at agencies themselves as well-suited sites for democratic practices (1992, 1515). At the risk of oversimplifying, a theory of civic republicanism holds that democratic practices should involve deliberation regarding the common good (Sunstein 1988), implying "inclusion of those who have been excluded" (Michelman 1987, 1495). To achieve these republican goals of inclusion and deliberation, agencies should, Seidenfeld says, go beyond the standard "notice and comment" procedures that allow for a public input, and take active measures to "encourage representatives of various interests to discuss fundamental issues" (1992, 1562). Other scholars have drawn on civic republicanism to draw similar conclusions. For example, Emerson (2019, 9) argues against the acceptance of a "sharp, categorical boundary between bureaucracy and the public sphere" and instead takes note of the ways that "administrative law has become a . . . real space for political action." Emphasizing the significance of "reason" and "deliberation" in the democratization of administrative and regulatory action, Emerson envisions a process whereby a "central role [is given] to public officials in reviewing citizens' contributions to the regulatory process and attempting to give a best account of what citizens wanted and valued" including a "written account" of how regulatory decisions were reached (ibid. 17–18). Emerson's republican vision allows for the possibility that market transactions are not the singular, "true" way in which citizens' wants or values are registered; rather, values can be formed and constituted through a deliberative process, fundamentally connected to a culture of "reason-giving" (18).

The notion that regulatory institutions are themselves well suited to serve as a space for democratic action and participation is not limited to republican theorists. Some who critique the republican notion as naïve or even utopian (insofar as it implies that any single democratic process can represent the common good, or a "public will") nonetheless argue that administrative agencies are well positioned to, and should, capture and solicit public opinion. For example, Walters (2022), advancing what he calls the "agonist" perspective that the internal conflict inherent to democracy should be embraced (rather than obscured with notions of a "common good"), argues that members of the public should have more control over agency "agenda-setting" (63). Among other things, this is likely to better incorporate the views of often underrepresented communities. Jackson (2023), coming from the perspective that administrative agencies represent the public no less than legislative bodies do, similarly argues that political conflict within a democracy should be embraced rather than obscured. Accordingly, to ensure that all potential voices in this internal conflict are taken into account, she argues that agencies have a "duty to investigate, survey, interview, and otherwise *find out* what individual citizens deal with as they set their decision-making agendas," and thus be "proactive and reactive" (69, emphasis in original).

Among scholars advocating for a greater role for the public in administrative decisions, Sabeel Rahman is especially noteworthy because of his role as Senior Counselor of OIRA from 2021 to 2023. In Rahman's terms, we should conceive of the "regulatory state as [itself] a site of democratic action" (Rahman 2016, 141). While drawing in part on republicanism (ibid. at 4), Rahman frames his argument primarily in terms of combating various forms of domination. This includes domination inherent in

[21] This last example was highlighted by Kagan's dissent in *Loper Bright*. As Kagan notes, agencies fill in statutory gaps not only by drawing on their scientific expertise, but, in addition, by making policy decisions that Congress left to them by "balancing competing goals and values." *Loper Bright*, 602 U.S. at 457–58 (Kagan, J., dissenting).

markets, as well as domination that results from the "technocracy" of the regulatory institutions themselves (90). Accordingly, ideal regulatory policy design would, he argues, "promote greater democratic responsiveness," "mitigate power disparities," and amplify the voices of otherwise marginalized constituencies (Rahman 2017, 1, 9). Along with coauthor Gilman, Rahman has set out models of participatory democracy applicable to the regulatory context. As just one example, Rahman and Gilman point to the Consumer Financial Protection Bureau (CFPB). Apart from having high visibility as a regulatory body charged explicitly with the job of consumer protection, and therefore functioning as a space where consumer advocacy groups can direct their organizing efforts, the CFPB employs various mechanisms to incorporate the concerns of consumers in their decisions, including staff dedicated to community outreach (Rahman and Gilman 2019, 143). While Rahman and Gilman acknowledge that the model has limitations, they also point out that it has been successful enough to have become a target by the business community. Ultimately, for Rahman and Gilman, a key goal is to design policymaking institutions in a way that engages with "civil society organizations" and "social movements" with the ultimate goal of shifting power imbalances (ibid. at 47).

Hence, one can argue that whether conceptualized in terms of republicanism, pluralism, agonism, or another political theory, a significant amount of scholarship advocates for the institutionalization of mechanisms and processes[22] within administrative agencies that increase the role of deliberative democracy, that take account of the diverse array of interests and stakeholders, and that ensure a role for marginalized communities.

C. CBA and Non-Neoclassical Valuations: The Use of the Discount Rate in Climate Change Regulation

However, what this scholarship has largely failed to emphasize is that any such democratic institutions need not yield to CBA as the primary method for justifying policy, because CBA reflects nothing more than a competing notion of the proper way to incorporate, constitute, and facilitate the emergence and articulation of citizens' values. CBA does so under the guise of being the one value-free way of capturing these values, when it is anything but. CBA has all the trappings of pure science, but it is nothing more than one of many possible normative postures on which to ground policymaking. CBA is no less fundamentally political than any other set of institutions or processes. Rather than simply mirroring or representing the will of individual agents, it is an expression of that will as shaped by market institutions. Alternative conceptions of democracy, and correspondingly different institutional mechanisms, will both reflect and construct differently shaped desires. The relevant question therefore is not how best to capture and represent the various wills in the polity, but, Among the myriad forms that our subjectivity can take, what forms appear most suited for policymaking? As indicated throughout this article, I suggest that it is *not* the subjectivity endogenously shaped by market relations (in which we remain self-interested, and regard all sets of alternatives as akin to commodities, substitutable or tradeable for one another at definite rates), but, rather, the subjectivity shaped by the

[22] To be sure, the creation of any such processes is not "costless" to agencies (Walters 2022, 40). Hence Bagley (2019), cautioning against what he calls the excessive use of "proceduralism," argues that a surfeit of rules imposed on agency decision-making can, rather than legitimize rulemaking, "hamstring" rules meant to protect consumers, workers, and the environment (346). However, while one can reasonably express concern about procedures preventing agencies from accomplishing substantive goals, there are procedures and there are procedures—and the relative worth of procedures might depend on one's view of legitimate substantive goals. If one such substantive goal is *democratic accountability itself*, then the relevant question becomes how to facilitate that accountability. CBA carries the pretense of being the one value-neutral means of doing so. But it isn't—because there is no such value-free means.

act of participating in a political community (as varied and heterogeneous as participatory acts may be).

The question then arises: In what ways might creating robustly democratic regulatory institutions reflect and facilitate sets of desires or values other than those manifested in CBA? I turn to this question here, contrasting CBA and non-CBA forms of valuation, drawing on the example of climate change by way of illustration. Specifically, first, I discuss how the use of the discount rate in climate change regulations reflects the neoclassical assumption of exogenous preferences, thus foreclosing the possibility that democratic institutions might endogenously shape valuations of future environmental harms; second, I discuss how the assumption of exogenous preferences within CBA limits the otherwise ambitious attempt by the Biden administration to democratize the regulatory process, as proposed in the OIRA Memo, thus undermining the very considerations of "equity" (in environmental matters and otherwise) that this proposal is explicitly intended to advance; third, I briefly examine proposals for *qualitative* evaluations of policy choices, including "scenario analysis," and how this might capture important non-CBA forms of valuation, including valuation of the environment. Last, I examine the role of science in policy assessment. This last question is critical because, as suggested earlier, CBA's scientistic trappings obscure its fundamentally normative nature. Genuine scientific endeavors, though clearly having a critical role in *informing* policy choices, cannot *dictate* them, simply because there is no single value-neutral "scientific" formula for making normative assessments. I illustrate this point through discussion of the Intergovernmental Panel on Climate Change (IPCC global warming temperature targets).

1. Use of the Discount Rate in Climate Change Regulation

The worst effects of climate change are expected to take place in the future. Therefore, the application of CBA to climate change raises the question of whether, and to what extent, to discount the future benefits of ameliorating the worst effects of climate change. According to standard neoclassical logic, individuals have a time preference for present consumption over future consumption. This view of time preference serves as a standard explanation for interest rates on financial assets—that is, interest is the compensation for deferral of present consumption in favor of future consumption (Rothbard 1991). Per this logic, the dollar value of the future benefits of a regulation should be discounted to present value, and the discounting should be based on interest rates in the financial markets. Circular A-4 endorses this logic, observing that an essential part of the rationale for discounting to present value is that "people prefer consumption now rather than later" (Circular A-4 2023, 75). It then uses the real (inflation-adjusted) interest rate on long-term government debt as the appropriate discount rate.

First, this standard neoclassical view of time preference is debatable in the economic literature. Some research suggests, for example, that the conventional discount-rate model might best capture "money-related behavior" (Frederick et al. 2002, 392), but that non-money-related behaviors are better captured by more complex and heterogenous understandings of preferences regarding time (see, for example, Loewenstein and Prelec 1993; Frederick et al. 2002, 365, observing that behaviors that deviate from predictions of the standard discounting model often do not appear to the *subjects themselves* as anomalous behaviors). This in turn may suggest that, to the extent that the economic subject does indeed have a preference for present over future consumption, this is at least in part endogenously constructed by participating in market institutions themselves.

However, even if we decide to accept the standard neoclassical picture of the time preference (as Circular A-4 does), critics have argued that this logic does not apply to benefits that accrue to future generations—precisely the sort of benefits we are trying to create by forestalling the worst of climate change. That is, even if we take as given that individuals have a preference for present over future consumption generally, sacrificing current consumption for future generations has nothing to do with individual preferences regarding one's *own* consumption. Instead, it is a fundamentally ethical question concerning how much we want to sacrifice for the sake of others (Ackerman 2008, 327).

Circular A-4 partly acknowledges this criticism, noting that "[s]pecial ethical considerations arise when comparing benefits and costs across generations" because "future citizens and residents who are affected by such choices cannot take part in making them, and today's society must act with some consideration of their interest" (2023, 80). It then notes that an extensive body of literature takes a "prescriptive" approach to determining a discount rate in light of these special ethical considerations, rather than a "descriptive" one. In the literature, a "prescriptive" approach refers to the designation of an appropriate discount rate by economists or policymakers themselves, whereas a "descriptive" approach presumes to find people's actual time preferences using various sorts of market data (ibid. at 80).

But imagining that these are the only two options betrays a failure (either by Circular A-4 or the "prescriptive vs. descriptive" literature to which it refers) to consider that our "preferences" regarding the value we place on benefits for future generations might be endogenous to the institutional context, and, more specifically, to the question of whether we are acting in our capacity as agents in a market, or as members of a democratic polity. Instead, the economics profession, as well as the regulatory apparatus, appears to remain trapped in its naturalist assumptions regarding the neoclassical subject, and therefore also in its normative position that it is the desires of that subject (and that subject alone) to which the regulatory apparatus must defer.

We can see this by looking at criticisms in the literature of the "prescriptive" approach by advocates of a "descriptive" one. The criticism boils down to the view that it is not economists' job to impose their preferences on society, but rather to describe preferences as they find them. Making the point rather forcefully, Weitzman (2007, 712) objects that the prescriptive approach relies on:

> a priori philosopher-king ethical judgements about the immorality of treating future generations differently from the current generation—instead of trying to back out what . . . representative members of society . . . might be revealing from their behavior is their implicit rate of pure time preference. An enormously important part of the "discipline" of economics is supposed to be that economists understand the difference between their own personal preferences for apples over oranges and the preferences of others for apples over oranges.

He then goes on to acknowledge that "inferring society's revealed [time preference]" is not easy where "long-term discounting" is concerned, but that at least "a good-faith effort" must be made. This is essential, he writes, to "convincing the public that the economists doing the studies are not drawing conclusions primarily from imposing their own value judgements on the rest of the world" (Weitzman 2007, 712).

Similarly, Nordhaus (2007) complains that the prescriptivist approach of the Stern Review[23] "takes the lofty vantage point of the world social planner, perhaps stoking the dying embers of the British Empire, in determining the way the world should combat the dangers of global warming," and that accordingly "the world . . . should use the combination of time discounting and consumption elasticity that the Review's authors find persuasive from their ethical vantage point" as opposed to the time preferences of individual subjects in the market (ibid. at 691).

The normative stakes are clear. Whatever else one considers part of the definition of optimal social order, an absolutely necessary condition for it is that we *defer to the preferences of the individual*. Unimagined are the ways in which these preferences may change depending on the social context. For the sake of argument, assume, as Circular A-4 has, that the real rate of return on long-term government debt reasonably reflects individual time preference in the market (2023, 75). Why should we presume that, if asked in a democratic forum providing for deliberation—such as, say, a regulatory agency structured as a site of public participation—how much weight should be placed on the amelioration of environmental harms for future generations, individuals might not respond with a different answer than that suggested by the interest rate in the market—one perhaps more properly characterized as an ethical judgment, rather than a personal taste or preference? And if indeed individuals give a different answer, would it be any less "descriptive" a project to describe *those* responses, rather than those inferred from market behavior?[24]

The reshaping of regulatory agencies as loci of participatory processes does not by any means imply the existence of a "philosopher-king." On the contrary, it implies that any aspiring kings should be dethroned, to be replaced with robust efforts by agencies to include public perspectives, including those of the most marginalized. The voices that emerge from that process could be no less "described" or "represented" than the "willingness" to value the future that is presumably inferred from financial markets. Indeed, if anything, it is a considerably greater stretch to infer anything about the worth we place on future lives and well-beings from financial markets than from the worth that might emerge from conscious deliberation about this question. But the naturalization of the Jevonian subject, pervasive within the field of economics, evidently blinds economists and policymakers to any possible normative vision for society other than one that includes deference to that subject's will, and not the will of agents within a polity, articulated and endogenously formed through a democratically responsive regulatory state.

2. Biden Administration Measures to Democratize the Regulatory State

Can more be said about what a democratically responsive regulatory state might look like, as well as its relationship to CBA? An answer can be gleaned from the Biden administration reforms themselves. As noted earlier, under these reforms the relationship between the emphasis on democracy and increased participation in regulatory law on the one hand, and the core role of CBA on the other, is complex, where the potential for democratic practices to replace CBA as the normative lodestone is obscured by the absence of an ontological analysis of the economic subject as CBA's foundation. That

[23] This refers to a study on the economics of climate change commissioned by the UK government (Stern 2007).

[24] There are of course other considerably large issues in applying CBA to climate change that I do not elaborate on here, including the role of uncertainty. Uncertainty about the scale of harms in the future is arguably a persuasive enough reason to spend greater sums of money on avoiding those harms than would seem warranted by time preferences as ostensibly revealed by financial markets (Weitzman 2007; Ackerman and Finlayson 2006). See also discussion of the role of "epistemic humility" in the application of "scenario analysis" in Part IV-C-3.

complexity is further evinced in the July 2023 OIRA Memo, "Broadening Public Participation and Community Engagement in the Regulatory Process." The OIRA Memo stresses the importance of creating "effective and meaningful public engagement" in the regulatory process, "especially early on in setting regulatory priorities and in the early stages of rule development before a proposed regulation is issued for comment" (2023, 3). The OIRA Memo also stresses the importance of conducting outreach to potentially affected communities. Hence, the OIRA Memo reflects the trend in scholarship outlined above to engage, facilitate, and foster community participation in the regulatory process in more meaningful ways.

But the memo goes further still, and attempts to show how meaningful participation can, in fact, supplement CBA. Consider the following passage:

> Greater participation and engagement can also strengthen agencies' understanding of regulations' potential benefits and costs, both quantitative and qualitative. Participation and engagement can inform decisions about how to describe benefits and costs . . . Public input can also help agencies characterize regulatory impacts that are challenging to monetize or quantify. Accounts of individuals' experiences, for instance, can help agencies describe how regulations affect people's lives as well as critical values like human dignity, equity, and fairness, values that are affirmed in the Presidential Memorandum on Modernizing Regulatory Review and Executive Order 13563, Improving Regulation and Regulatory Review (January 18, 2011). (OIRA Memo 2023, 5)

This passage is fascinating, not only because of its invitation for further democratic practices in rulemaking, but also for the limitations placed thereon. It explicitly acknowledges that greater democratic participation can help agencies account for regulatory impacts that are "challenging to monetize or quantify," citing values like dignity, equity, and fairness. In theory, this passage could imply that greater and more meaningful public participation could shape, if not be determinative or dispositive of, the relative weights agencies should place on a host of potential regulatory impacts. But this holds only so long as those impacts are regarded as "challenging to monetize or quantify." And, as discussed above, the economics profession—and, hence, the policymaking community—has decided that the universe of such impacts is considerably more limited than one might imagine, because of the naturalized neoclassical Jevonian subject. But the limitation, as we have also seen, is drawn without any theoretical consistency, exempting "dignity" from the world of monetization even though we have seen the economics profession find itself no less able to monetize "dignity" than life.

Consider again the question of the value of future harmful effects of climate change. As outlined in Circular A-4, and discussed above, the Biden administration has already uncritically adopted the method for answering that question as supplied by neoclassical economics: Find market indicia of people's time preference located in interest-bearing financial instruments. This method of "finding" preferences necessarily means that the considerations of equity regarding the treatment of future generations, notwithstanding the explicit mention of "equity" in the OIRA Memo, is excluded from consideration a priori. One cannot even reach the question of whether members of the public would say that future generations are to be valued less than the present one, because the answer is already taken to be revealed in the financial instrument data. Thus, what the OIRA Memo would appear to have giveth, CBA hath already taken away.

Hence, we find ourselves face to face again with the contradictory and complex nature of the Biden regulatory reforms. On the one hand, there is an explicit and affirmative push for more meaningful

public participation in the regulatory process, to be encouraged by the agencies themselves through various outreach efforts. On the other hand, we see how an uncritical adoption of the tenets of CBA places limits on the extent to which that participation could shape regulatory outcomes.

Small tweaks in the OIRA Memo could, however, open the door to creating a space for public participation that meaningfully pushes back on CBA's all-encompassing ambitions. For example, what if the text read, not merely that participation can help agencies "understand" and better "describe" benefits and costs (both qualitative and quantitative), but that it can help agencies place relative weights or degrees of significance on those benefits and costs, whether quantitatively or qualitatively? This would constitute a more direct, frontal attack on the core placement of CBA in regulatory law, insofar as it would explicitly identify the regulatory space as a legitimate one for policy deliberation. Because we now know that any such weights or values are endogenous to institutional context, such a frontal attack would be entirely justified—provided, of course, that democracy is *itself* regarded as a value.

3. A Qualitative Approach to Policy Choice: The Ineliminable Role of Value Judgments

That said, the suggestion that using CBA to make policy choices can be replaced by decision-making through democratic institutions may appear unsatisfactory, since we are left with no suggestion as to how precisely to make those choices. Indeed, the fact that CBA appears to measure various alternatives with precision is a part of its appeal. But this capacity of CBA is in appearance only, resting on the fiction of the naturalized subject with exogenous preferences and internal rates of substitution. The absence of precision can leave anyone with a sense not merely of uncertainty, but also of unease. But the desire to walk on *terra firma* is no excuse to hold fast to a method that rests on a fictitious ontology. We are left with political, non-value-neutral methods of weighing alternatives regardless of the regulatory approach. Again, this needs to be embraced and acknowledged, not obscured.

One way of doing so might be to explicitly recognize that a rejection of CBA does not translate into a rejection of *any* possible process of weighing alternatives. Sinden (2015) makes this point when arguing that one can imagine both "formal" and "informal" forms of CBA. On the more "informal" end of the spectrum lies the sort of rough weighing of pros and cons that many of us perform even in our daily lives when making significant decisions. To illustrate, Sinden quotes Ben Franklin as describing his decision-making process as listing of pros and cons "in two columns" (ibid. at 99). Though this may be lacking in precision, said Franklin, it still provided him with a "moral or prudential algebra" (123). At the more formal end of the spectrum is a CBA that is not only entirely quantified, but quantified in monetary units. Somewhere in between the two might lie forms of CBA that involve partly qualitative, partly quantitative treatment of alternatives, with a subset of the latter being monetized. Resisting the temptation to fully monetize the various possibilities in the option set does not imply, therefore, that we abandon all capacity for policymaking—only that we are irreducibly left with questions of judgment and values (and why shouldn't we be, in the realm of policy?).

Some authors have suggested "scenario analysis" as a method for more explicitly incorporating different types and dimensions of value than does CBA. As Pasquale (2023) describes it, scenario analysis consists of an "extended narrative prediction of how a given policy decision will increase the likelihood of some complex set of consequences and decrease that of others" (ibid. at 56). Among other things, this narrative approach allows for incorporations of value excluded from standard CBA. As an example, Pasquale points to the work of Hamut Rosa, who describes "first person,

phenomenological" experiences of nature (like the "expanse of the sea" or "warmth of the sun"), as something that can and should inform environmental policy (60). Because such considerations rely on a theory of value other than the "willingness to pay" metric, they are excluded from a CBA-based rule, even though they form no less a part of our subjectivity. Other virtues of scenario analysis include its emphasis on acknowledging uncertainty in determining different scenarios. This "epistemic humility," notes Pasquale, should not necessarily lead to a laissez-faire posture (as it might from a Hayekian perspective); it could instead justify regulatory rules, given the uncertainty surrounding the likelihood of dire or perhaps cataclysmic events like crises in financial markets (61; see also Driesen 2003, 6–7).

Any decisions arrived at using "scenario analysis" (or any other similar perspective) would be founded on both scientific and normative considerations. We need to recall, first, that scientific considerations alone cannot dictate policy judgments, and, second, that CBA is itself a fundamentally normative enterprise, whose normativity is obscured by its scientistic trappings.

To further illustrate these points, we can return again to the question of climate change. While the scientific community of climatologists can explain what the effects on the planet will be if the current rate of greenhouse gasses continues unabated, it remains the case that the weight and significance we place on those effects is ultimately a question of values. Consider a Special Report by the Intergovernmental Panel on Climate Change (IPCC), reflecting the scientific consensus that risks to the planet are considerably greater if global warming rises to 2 degrees Celsius higher than preindustrial levels, as opposed to 1.5 degrees Celsius (2018, 6–11). An increase from the 1.5 to 2 degrees Celsius mark might create what the IPCC calls "very high risks of severe impacts" (ibid. at 11). Hence, a global consensus emerged, reflected in the 2015 Paris Agreement, to keep global warming no higher than the 1.5 degree target (4). This target is not exclusively determined by scientific evidence. It is partially the result of a *normative* judgment that an increase to 2 degrees would be ethically unacceptable, particularly for the most vulnerable nations. The IPCC report says this explicitly:

> Ethical considerations, and the principle of equity in particular, are central to this report, recognizing that many of the impacts of warming up to and beyond 1.5°C, and some potential impacts of mitigation actions required to limit warming to 1.5°C, fall disproportionately on the poor and vulnerable. Equity has procedural and distributive dimensions and requires fairness in burden sharing both between generations and between and within nations. (IPCC 2018, 31)

In fact, the Paris Agreement initially had a target of 2 degrees Celsius. The target was lowered only due to the political action of those nations most vulnerable to the effects of climate change (including many island nations). These nations were generally poorer, and therefore carried less political clout, than the industrialized nations that dominated the Paris talks. Lowering the target for global warming therefore required their concerted political action. In 2015, a spokesperson from Christin Aid (a UK organization advocating around issues of poverty and climate change) said about the Paris talks:

> Although today the leaders of the rich and powerful nations will make all the headlines, it is vital that the voices of the world's most vulnerable countries are heard. These countries have grown tired of empty words from world leaders and they cannot afford any more in Paris. They are reaching out between and across traditional negotiating blocs to help build a better and safer future for all of us. . . . For these countries, a two-degree world is a miserable one and they are right to use their high moral authority to call for bolder and more ambitious action from this summit. (Vidal and Harvey 2015)

Hence, the 1.5 degree Celsius consensus cannot be attributed to climatology data alone, but to a *normative* judgment regarding the degree of harm that was ethically acceptable to more vulnerable and poorer populations. In other words, it was a decision about values. And as with any other decision about values, it was arrived at—and only could have been arrived at—through a *political* process. In this case, the process ultimately considered the interests of countries throughout the international community. Hence, while surely imperfect, it involved deliberation and evaluation by relevant interested parties, the scientific community, and affirmatively took into account the needs of the poorer members of the international community with less political clout.[25]

What did *not* happen at any point in the process of determining the 1.5 degree target was, say, a VSL calculation performed to determine the dollar value of fatality reductions; nor did anyone consult financial markets to determine the extent to which the lives of future generations should be discounted. Instead, as noted above, there was an affirmatively stated ethical commitment for "burden sharing both between generations and between and within nations." There is simply no credible argument that the typical CBA methods of finding a VSL and then discounting those values are in any way a superior method for determining the "optimal" climate temperature than that arrived at through the political process that resulted in ethical, normative considerations reflected in the Paris Agreement.

V. Democratic Valuation and the Reckoning of Costs: Economic Expertise on Productive Efficiency

In arguing that economists have no special expertise in determining the appropriate monetary values to place on potential social benefits, and that the question of the kind and degree of such benefits should be left to democratic bodies or institutions, I am not suggesting that we abandon any and all potential economic expertise. One might well wonder, even if the question of what benefits should be pursued, and to what extent, could economists still suggest *cost-effective*[26] methods of achieving those benefits? Put otherwise, even if we abandon the notions of Pareto efficiency or potential Pareto efficiency, can we not still adopt a *productively* efficient method in achieving these social goals?[27]

My short answer to this question is yes: Abandoning CBA's aspiration of finding an "optimum optimorium" (Hitch 1953, 98) should not preclude us from determining least-cost paths to achieving social goals or targets. As an illustration: Many economists have attempted to find a "social cost of carbon" by determining the loss of social welfare from carbon emissions, and using that loss to determine the "benefit" of carbon reduction in CBA of climate change policies (see, for example,

[25] Unfortunately, recent research indicates that the chances of meeting the 1.5 degree Celsius target are becoming dimmer (see, for example, Bertram et al. 2024). Hence, the "ethical considerations" behind that target, may, absent a drastic course correction, all be for naught.

[26] A common method used by regulatory agencies in attempting to find a "least cost" of a policy goal is typically Cost Effectiveness Analysis (CEA). As described by Circular A-4, CEA "can provide a rigorous way to identify options that achieve the most effective use of a given amount of resources, without requiring monetization of all relevant benefits or costs." More formally, CEA is constructed as a ratio with cost in the numerator, and the denominator consisting of "some units of effectiveness or performance"—an example of which might include lives saved (2023, 5). Thus, at first blush, CEA might seem to avoid the problem of monetizing nonmarket goods. However, without a clear rejection of a subjective notion of costs—that is, of costs in terms of "willingness to pay"—a CEA still risks relying on the same implied assumption of exogenous preferences. The implications of considering costs in a subjective vs. objective sense are addressed in this section.

[27] As indicated in Silverman (2024), this was in essence the approach proposed by Hitch (1953) when confronted with the question of how to achieve nonmonetized military objectives.

Nordhaus 2019). However, it is no less possible to take some *politically* arrived at temperature target *as a given*, and then determine how to *price* carbon, in order to find the least-cost path of reaching that target. This is the approach advocated by Stern et al. (2022). If one argues that consensus on temperature targets *has already been reached*, and reflected in the Paris Accords, the task of economists then becomes to find the least-cost path to reaching that goal—*not* to substitute their judgment for the judgment of that consensus goal (especially when economists approach the difficult questions of equity and "intergenerational values," among others, raised by climate change, through a "consequentialist" framework, and ignore, for example, perspectives based on "liberty, justice and rights, in the tradition of Isaiah Berlin and Amartya Sen") (Stern and Stiglitz 2021, 40). Taking a temperature target *as a given*, based on the kind of normative considerations described above, is entirely distinct from the standard CBA approach of attempting to monetize all possible benefits of carbon reduction (including nonmarket benefits), comparing that with the costs of carbon abatement, and using that process to find an "optimal" (or target) temperature (Kaufman et al. 2020).

However, even this more modest "least-cost" approach is not without conceptual challenge. In particular, the risk (at least theoretically) is that it places us precisely back where we started: with outcomes we wish to avoid, reasonably described as "costs," for which we would now need to find a WTP to avoid. For example, regulatory policies are often said to cause job loss. But it would be entirely insufficient to reckon the dollar value of job loss in terms of, say, forgone income, since, as is well documented, the *social harms* of job loss reach beyond simple income loss (see, for example, Brand 2015). Individuals, or society as a whole, might be *willing to pay* a dollar sum to prevent job losses greater than the lost income. But any such WTP will be socially and institutionally dependent, and, more specifically, might vary depending on the scope of a democratic deliberative process *shaping* this WTP. Hence, the reckoning of such "costs" places us squarely back in a political space.

That said, the reckoning of monetary costs can still be relevant—though not dispositive—to the question of how "best" to achieve social and political goals, provided that such costs are in terms of *dollars actually spent* by industry in response to a regulation. This is because such explicit expenditures can give us relevant information about the opportunity costs of a regulation. But even here, care must be taken, because the concept of "opportunity cost" can be conceived of in a purely *subjective* sense—that is, in terms of the individual WTP placed on them. Indeed, this is precisely how Circular A-4 uses the term, specifically stating that measuring both costs and benefits in terms of WTP "captures the notion of opportunity cost" (2023, 28). Since the notion of an exogenously determined WTP has now been roundly dispensed with, we instead need to consider "opportunity cost" in an *objective* sense. More specifically, if we are interested in the dollar-denominated opportunity costs of a regulation to society (and not just the industry regulated), then we need to understand it in the sense of the market value of resources left available *for other uses*.[28] If, say, a policy rule requires that $74,000 in explicit costs be spent in engineering labor per refinery in order to reduce chemical accidents (see the Environmental Protection Agency's Regulatory Impact Analysis 2022) then, assuming that this $74,000 in engineering labor was not otherwise employed, it would be diverted from other uses.

Note that this assumption of full employment is essential to the analysis. Without it, a requirement of monetary expenditure by an industry is a cost to the industry alone, and not to society as a whole. Indeed, if the engineers would be otherwise unemployed, then their employment by the industry not only does not constitute a "cost" to society, it also is income to the engineers themselves.

[28] Economists do not always display stellar awareness of possible differences between "objective" and "subjective" notions of opportunity costs. Indeed, they quite often elide the distinction (Vaughn 1980).

Of course, resources are never this mobile. Capital and labor suitable for certain uses are not so seamlessly deployed toward other uses. Moreover, the very concept of "full employment" of resources risks being interpreted as a purely technical question, as opposed to being at least partly shaped by social and institutional conditions (see, for example, Stanfield 1999, 234). Nonetheless, the focus on the question of full employment and the associated objective view of opportunity costs serves as a check against conflating what might be a cost to a given industry with a cost to society as a whole—and it is only the latter that matters if our concern is *social* welfare (and not the welfare of any particular party).

It bears repeating, however, that this use of explicit monetary expenditures is limited in giving us information regarding opportunity costs. Specifically, it is limited only to telling us, in dollar terms, the opportunity cost of resources traded *as commodities in a monetized market*. But it cannot give us information about *all* possible trade-offs, simply because it cannot make all such trade-offs *commensurable* in dollar terms (see, for example, Radin 1996). Again, the economist's route to creating this commensurability has been the invention of the neoclassical subject with exogenous preferences. The dismissal of this fictionalized subject forecloses this route.

Yet, the critique of the naturalized neoclassical subject does not mean that prices become irrelevant. Prices, after all, are information about the rate at which goods are exchanged for one another on the market (Walras 1969; Marx 2004). These rates of exchange constitute relevant information for any deliberative democratic body deciding on social *desiderata* regarding how to meet those goals at least cost. But the fact that this information is relevant does not mean it is dispositive. Any cost that depends on the individual's subjective state or desire will not be exogenously determined by that subject. Thus, my view that CBA should be consigned to the scrap heap does not mean that economists should be precluded from discerning and communicating to relevant institutions, such as democratized regulatory agencies, salient, albeit limited, information on productivity-efficient methods to meet goals that these agencies have decided on through participatory and democratic mechanisms. But economists' input, and any expertise they might draw on regarding means for achieving goals, implies no degree of expertise they may otherwise claim to have about how to best *set* goals in the first instance.

VI. Conclusion

Neoclassical economists have gone beyond conducting empirical inquiry to the rates of exchange between goods on the market to declare that there exists an *internal* process of valuing by individuals, necessarily involving their own internal rates of exchange, or of substitution, between all possible goods, whether commodities or otherwise. Charmed by the market's power to render commensurable an ever-expanding world of things (Marx and Engels 1906), economists have decided that the economic subject renders everything commensurable as an essential part of the process of valuation: good health, clean air, the preservation of environmental quality, the protection of future generations, dignity, civil rights, and so on.

But this is a fiction. It is a heady dream, inspired by the extraordinary reach and scope of the market. It is past time to put that fiction to rest. In its place, we need, first, a more complex vision of the subject, with heterogenous desires and values, endogenously shaped by institutional contexts; and second, a recognition that the desires and values expressed by this complex subject in and through democratic institutions are at least no less valid, and likely more valid, for policy purposes than are the

simple "preferences" or "tastes" that are ostensibly registered and revealed through market transactions. Further, these democratic institutions can be forged by broadening opportunities for public input in the very regulatory agencies that are often otherwise legally obligated to find normatively "optimal" outcomes through the use of CBA, and are thereby restricted from, or at least limited in, allowing robust public participation in regulatory decision-making to *itself* determine desired policy goals and their salience or import. Alternative non-neoclassical visions of the economic subject can allow for the creation of more broadly democratic regulatory institutions, while simultaneously preventing the scientism of CBA from depriving those institutions of the legitimate function of shaping and prioritizing competing policy goals. Additionally, nothing about abandoning the futile attempt to monetize all costs and benefits of a policy precludes such democratized institutions from engaging in a qualitative weighing or assessment of different policy options.

Further, nothing about the rejection of CBA implies that such an assessment cannot be informed by scientific considerations and scientific expertise, provided one recalls that science cannot by itself determine *normative* judgments, and that CBA is *not* a simple and pure science (like, say, climatology), but rather itself a fundamentally normative enterprise whose own normativity is obscured by its scientistic trappings. Finally, none of this renders economists irrelevant. If regulatory agencies arrive at policy goals through broad-based public participation, nothing about this article's critique of CBA means that market prices of resources required to meet those goals become immaterial—only that economists should drop any presumption to special knowledge about the *value* to be placed on those goals. The sphere of *value*, in questions of policy, I am therefore arguing, must ultimately be left to political actors in political, democratically constructed institutions.

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