

How Do We Define the Feasible Set?

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Abstract

How should we define the “feasible set”? What does it mean to assert that a policy is the “best feasible option”? Feasibility is most plausibly a matter of degree rather than of kind. We therefore must think about how to do normative economics with a fuzzy social budget constraint. I consider a number of ways of proceeding, including a two-dimensional social welfare function, weighting both desirability and feasibility. Focusing on the difficulties in the feasibility concept may help us resolve some outstanding policy disagreements.

I. Introduction

To adjudicate among competing political philosophies, or competing policy prescriptions, we must delineate the feasible set. Using other words, we must decide how utopian we are willing to be. To give a simple example, pure communism may sound good as an abstract ideal. But we reject the idea of a world without scarcity as excessively utopian. We instead opt for some more practicable vision of how the world ought to be.

The issue of feasibility pops up more generally. In a modern American political context, conservatives charge that human self-interest will turn benevolent-sounding social programs into corrupt destroyers of social values. In other words they claim that the left-liberal vision is not feasible. Similarly, liberals claim that the realities of politics and the instability of markets will prevent conservatives from disassembling big government without chaos. Critics from both left and right charge that libertarianism would create an unstable power vacuum and could not persist. In this view the libertarian program of wishing the state would go away is no more meaningful than wishing there were no hurricanes.¹

I am concerned with some basic queries. How do we define the “feasible set”? What does it mean when we allege that some view or proposal is “too utopian”? Does a high degree of utopianness provide reason to lower our estimation of a proposed alternative? If so, what are the implications for positive and normative economics?²

¹ Bertell Ollman, in a public debate, once remarked: "Libertarians are a little bit like people who go into a Chinese restaurant and order pizza." Along similar lines, Sciabarra (2000, p.8) writes: "Ultimately, most critics wonder if libertarianism is possible given existing social conditions. Is it merely one example of the utopianism against which Hayek himself has warned?" Ollman is cited in Sciabarra (2000, p.8).

² The literature on utopias raises related questions, although it does not address them in a rational choice framework. Kolnai (1995, p.17) writes: "How exactly can we distinguish between the proper pursuit of the good and its perfectionist aberration?" Manuel and Manuel (1979, p.8) note: "...one man's trivial revision is another man's upheaval." Mannheim (1936, p.203) refers to the "difficulty in defining precisely what, at a given period, is to be regarded as ideology, and what as utopia..." Since at least Friedrich Engels, this topic has been a staple of socialist debate as well. Levitas (1990, p.3)

We all dismiss Charles Fourier's belief that socialism would bring oceans of lemonade and ship-pulling dolphins, but consider another comparison. Milton Friedman has argued that we should eliminate milk price supports and create a free market in milk. We can imagine some other voice, call it the dairy lobby, defending the status quo. What if the dairy lobby were to invoke excess utopianism against Milton Friedman? After all, eliminating milk price supports does appear to be more utopian than maintaining the status quo. So if getting rid of milk price supports is more utopian than keeping current policy, does that constitute an argument against getting rid of milk price supports? Can we dismiss laissez-faire in milk, as we dismissed Fourier, on the grounds that it is excessively utopian?

Milton Friedman (2002), in an essay for the Cato Institute, laid out the general dilemma starkly, albeit unintentionally. His essay title referred to "Markets – the Ultimate Free Lunch." He argued that market economies capture gains from trade and can make everyone better off, if only we would rely on them more. But if markets are such a free lunch, why are they not more popular? What hidden cost of instituting markets has been ignored? Has Friedman not already told us elsewhere that "There is No Such Thing as a Free Lunch"? Is not asking for more markets simply another kind of utopianism, no more relevant than the plea for a free lunch?

The basic dilemma is this: Many reform proposals wish to have it both ways. They require that some degree of utopianism is acceptable. An underlying premise is that we should advocate good outcomes for their own sake, without necessarily predicting their

surveys some definitions of utopia. See also Mannheim (1936, chapter IV), Davis (1984), and Sargent (2000, p.15). Goodwin and Taylor (1982) consider the role that concepts of utopia have played in political debate. In the philosophical literature, Norcross (1997) argues that we need to consider the best available action relative to alternatives, and discusses the ambiguities in defining exactly what those alternatives are. On the relevance of related ideas for the free will controversies, see Dennett (1984). Austin (1961) and Pears (1973) consider the meanings of "if" and "can" in ordinary language philosophy. Blackburn (1984) considers some general issues involving morals and modal logic. The economics literature has not done much to address the issue of utopianism explicitly, but see Philbrook (1954), Dahlmann (1979), Brown (1988) and Klein (1999).

adoption. Without this willingness we cannot elevate the reform proposal above the status quo. Nonetheless there will exist other better, yet more utopian, proposals. Those alternative proposals must be rejected if we are to stick with our initial advocacy. And when we reject those "better proposals," we end up arguing that they are excessively utopian. Why are these reforms too utopian while ours are not? Why do some stand within the feasible set and others not?

Any reform proposal faces what Derek Parfit (1987) has called a "war on two fronts." The reform proposal, by definition, must offer something more utopian than the status quo, but must also place some limit on how utopian we are willing to be. When people make political arguments, they typically fight on only one front at a time. They criticize more ambitious reform proposals for being too utopian. At the same time they criticize defenders of the status quo for not being utopian enough. For a reform proposal to succeed against all comers, however, it must win on both fronts at the same time.

The same point can be expressed in economic language. At the textbook level, economists use the idea of a budget constraint to delineate the utopian from the feasible. In this view "moving along the budget constraint" (reshuffling resources) is feasible, whereas "wanting the budget constraint to shift out" (i.e., more resources for nothing) is excessively utopian. But this distinction begs the question. A society cannot move from one point along a budget constraint to another point without cost. The resources measured by the budget constraint are all owned and controlled by various agents, and in the absence of interference agents will allocate these resources one way rather than another. To ask for one allocation rather than another is to stipulate that some of these constraints and incentives be changed. We are simply asking for more resources, or for different resources, albeit in disguised fashion. (In essence we are missing at least one dimension from our axes; often this is transactions costs.) The real question is what the social budget constraint looks like in the first place. Once viewed in these terms, we cannot invoke the budget constraint as an a priori solution to the problem.

II. The Best Feasible Option and degrees of feasibility

Economists believe that feasibility matters when it comes to policy or institutional design. In fact economists usually regard feasibility as a trump card. I ask the core question of what it means to seek “the best feasible option,” a common concept in normative economic discourse.

I consider options as generalized descriptions of world-states, whether those world-states are realistic or not. We are not simply ranking policy prescriptions in the narrow sense of the term. Yes we are ranking “institute nationalized health care,” but we also are ranking “institute nationalized health care and have everyone behave cooperatively to hold down costs.” Furthermore we are ranking “institute nationalized health care and have scarcity vanish,” “institute nationalized health care and have tornados disappear,” as well as “institute nationalized health care and have human behavior remain just about the same, albeit with higher taxes.” Of course we may choose to reject some of these options ex post as outside the feasible set, but I will start the exercise with everything on the table.

Feasibility is most likely a spectrum rather than an all-or-nothing category. Some specified world-states are more utopian than others, but as a matter of degree rather than of kind.

In most cases it is easy to see how feasibility differences might be those of degree. I might, in common sense terms, argue that it is feasible for citizens to give one percent more of their income to charity. At the same time it is too utopian to expect everyone to give ninety percent of his or her income to charity. Human motivations would have to be “too different” for so much charity to be forthcoming. But the judgment of non-feasibility does not appear to kick in at any particular quantitative amount of giving, as could be defined in terms of the penny or dollar cut-off. Rather the more giving is specified, the lower the degree of feasibility that appears to obtain.

We can see degrees of feasibility even in the Fourier vision. Forget about oceans, what if we were told that socialism would bring us a mid-sized lake full of lemonade? A small

pond? A swimming pool? And so on. Again, it is difficult to find a distinct cut-off at which the specified world-states clearly and definitely cross from the realm of the feasible into the realm of the infeasible. In epistemic terms, it is even less likely that we could identify such a cut-off point, if it were to exist. So for all practical points of view, we are left with feasibility as a matter of degree.

In some cases common sense may suggest some firm lines. Perhaps Fourier's oceans of lemonade simply are absurd as a concept.³ But while this common sense approach may demarcate some obvious cases, it does not offer a general solution. In many cases we start with two (or more) groups of intelligent people with different notions of the feasible set, or what is excessively utopian (section V presents some concrete examples). In those cases the notion of feasibility is again likely a matter of degree. So even if we can find some distinctions of kind, a broad range of differences in degree will still be present. In the discussion to follow, we will focus on the large common sense range where the feasibility differences remain those of degree.

We might, as part of a belief in human free will, postulate another source of differences in kind. We could argue that feasibility results when the exercise of free will (perhaps collectively) could bring an outcome about. But even here feasibility appears to be a matter of degree. Perhaps many people "could," in some metaphysical sense, give ninety percent of their incomes to charity on a regular basis. But some acts of free will are "harder" or "easier" than others, or "more or less likely," thus reestablishing the notion of a broad continuum of degrees of feasibility.⁴

³ See Beecher (1986) on the thought of Fourier. In fairness to Fourier, he was also an early prophet of the steam locomotive, a view for which he was ridiculed; see Beecher (1986, p.59). On the lemonade idea, see Beecher (1986, p.125).

⁴ I may be "free" to sacrifice a child to the voice of God, as did Abraham, but this decision is not like choosing one apple rather than the other. Most people would find it incredibly hard to express their freedom in this manner. For similar reasons, it appears relatively utopian to expect massive self-sacrifice in the interests of broader civilization, even if people are free to make that choice in some technical sense specified by the

A spectrum of feasibility might offer several dimensions. A more feasible vision, compared to a less feasible vision, might be “more like” the world we know in terms of fact, more like the world we know in terms of adherence to laws of science, or more likely to come about in the future. David Lewis has suggested some standards for ranking worlds in terms of their similarity to each other. We could think of the more “similar” worlds to our own as somehow “more possible” or “less utopian.” Lewis's (1979, p.472) measure of similarity involves a lexical ranking of the following four qualities: “(1) It is of the first importance to avoid big, widespread diverse violations of [physical] law. (2) It is of the second importance to maximize the spatio-temporal region throughout which perfect match of particular fact prevails. (3) It is of the third importance to avoid even small, localized, simple violations of law. (4) It is of little or no importance to secure approximate similarity of particular fact, even in matters that concern us greatly.”

I do not mean to mount a defense of Lewis’s particular proposal.⁵ It is relevant primarily as one means of viewing feasibility as a general albeit multi-dimensional continuum.

A skeptic might deny that we can rank outcomes, even very roughly, in terms of their degree of utopianness. In this view we have no good metric, whether empirically or conceptually, for such a ranking. But as we will see below, such nay-saying would not solve the problems we will face. If such rankings are meaningless, we cannot define the feasible set at all. This view will turn out to have radical consequences, namely that we

philosopher. For some views of how the issue of free will relates to moral responsibility, see Frankfurt (1988) and Van Inwagen (1983).

⁵ Note that any such ranking algorithm will be vulnerable to philosophic conundrums and counterexamples. Consider a world that looks just like the status quo, except that one atom completely and consistently violates all known laws of physics. Consider a second world that follows all known laws of physics, but is populated by different people than our world, has different countries, different institutions, and so on. Which of these two worlds is “more similar” or “more possible”? What if one scenario changes our current world in one small way, but with a large final effect (e.g., someone shoots Hitler in 1934). Is this world “close” to our own or not? What could it mean, in principle, to answer these kinds of questions? For a treatment of degrees of possibility, see Forbes (1985, chapter seven).

must either be extreme utopians or extreme conservatives. Since I will return to these options in due course, let us put the skeptical attitude to the side for the time being. The more practical question is what a continuum of feasibility implies for normative welfare economics.

Before proceeding, note that I do not look to modal logic in defining the concept of a "best feasible option." Modal logic, after all, is a well-developed philosophic literature which looks at what it means to analyze or speak of "possible worlds." Nonetheless, without intending any finding of fault, modal logic is not well-suited to the more applied task at hand.⁶

It is beyond the scope of this article to survey modal logic in its complexity, but modal logic differs from this endeavor in several ways. First, most major approaches to modal logic deal with a very broadly circumscribed notion of what is feasible or possible. For instance it is frequently accepted that "talking donkeys," however strange the concept may be in common sense terms, belong to the set of possible worlds. Modal logic usually operates within a broader notion of the feasible than would resolve extant debates over the feasible set in policy or political philosophy. Our inquiry is more applied than is the bulk of the literature on modal logic. We are looking for a concrete method of judging feasibility, with some epistemic applicability, rather than a purely abstract standard of logical classification. Finally, modal logic itself presents many unsolved dilemmas, not the least of which is what the very concept of "possible worlds" means. For these reasons, we should not expect to find a ready-made answer to these core problems in the writings of modal logicians.

Where do we stand?

⁶ On various modal debates, see Loux (1979), Forbes (1985), Lewis (1986), Armstrong (1989), Lycan (1994), Hitchcock (1996), Pruss (2001), Sider (2002), Gendler and Hawthorne (2002), and Divers (2002).

The above discussion suggests that we can classify policies in terms of their desirability and also in terms of their feasibility. The two rankings, of course, will not coincide and along many margins we expect them to be negatively correlated. That is, there are numerous excellent options that are highly utopian. Our two rankings might look somewhat like this:

Desirability Rankings – Best to Worst

1. Oceans of lemonade and no scarcity
2. The status quo plus a big improvement in human nature
3. The status quo plus seven good economically-minded reforms
4. The status quo
5. No enforcement of statutes against business fraud
6. Communist totalitarianism

Of course I have offered only six of a much longer possible list. Every imaginable world-state can in fact be put on the list. And by offering an ordering at all, I am confronting the issues raised by Arrow's famous theorem; I will return to this topic below.

Similarly, we will have a ranking for feasibility as well, perhaps it looks as follows:

Feasibility Rankings – Most to least feasible

1. The status quo
2. The status quo plus seven good economically-minded reforms
3. No enforcement of statutes against business fraud
4. Communist totalitarianism
5. The status quo plus a big improvement in human nature
6. Oceans of lemonade and no scarcity

The two rankings will not in general coincide. Along some margins they may be rough inverses (very very good ideas may be difficult to pull off), but we should not expect them to be exact inverses either. That being said, arguably some options will be dominated. If one option is both less desirable and less feasible than some other option, perhaps the former option should be struck from consideration altogether. We then will end up with the remaining options standing in exact inverse relation. In the example at hand, we would drop “Communist totalitarianism,” as it both worse and less feasible than the status quo (in the United States, for instance); the same is true of “No enforcement of statues against business fraud.” The resulting desirability rankings would then look as follows:

Desirability Rankings – Best to Worst

1. Oceans of lemonade and no scarcity
2. The status quo plus a big improvement in human nature
3. The status quo plus seven good economically-minded reforms
4. The status quo

The new feasibility rankings would be the exact inverse of this list:

Feasibility Rankings – Most to least feasible

1. The status quo
2. The status quo plus seven good economically-minded reforms
3. The status quo plus a big improvement in human nature
4. Oceans of lemonade and no scarcity

At the relevant margins, we find a direct trade-off between desirability and feasibility.

Given such dual rankings, how should we evaluate social outcomes? I will consider three major options: use only a single dimension, “practical advocacy,” and construct a two-dimensional social welfare function. Let us examine each in turn.

III. Use only a single dimension

The Panglossian and extreme utopian views each use only a single dimension to evaluate world-states. They are extreme reactions to the dilemma at hand.

The extreme utopian view favors what is best, without worrying about feasibility. We already have discussed Fourier in this context. Along somewhat different lines, John Stuart Mill defended the perfectibility of mankind as a central political vision. He believed that the quality of human understanding could rise to extremely high levels across a broad cross-section of humanity. Turgot, Marquis de Condorcet, and Herbert Spencer all believed in extreme progress and human perfectibility, albeit in varying ways (see Manuel and Manuel 1979). The most utopian vision, of course, need not be based on the idea of human perfectibility. The modern extropian movement argues that technology will allow individuals to evolve into very different creatures, possibly ceasing to be humans. Whether the mechanism is uploads, artificial intelligence, nanotechnology, or genetic engineering, science has stimulated a new list of utopian visions. In this view Mill, by focusing on human perfectibility, did not go far enough and in fact set his sights quite low.

The Panglossian view favors what is most feasible – namely an observed status quo -- without admitting utopian speculation into the evaluation. In particular some economists make (or verge on making) the extreme claim that everything we observe is efficient. Nobel Laureate George Stigler in particular has been associated with this view, though he never made it in print as far as I can tell.⁷

⁷ Looking to this history of ideas, the Greek philosopher Parmenides stated the view that the world could not be any different than it is, an early version of the Pangloss idea. In contemporary times Leslie (1997) and Rescher (1999) argue that there is only one

Virtually everyone rejects the Panglossian view and many people scorn it. Nonetheless the Panglossian view makes life simple in some ways. Since we are already doing as well as we possibly can, we do not have to worry about normative dilemmas. Any beneficial improvement (that we do not already have) is too utopian and thus should be dismissed as an impossible “free lunch.” In essence the social budget constraint is now a single point.

When any claim of inefficiency comes up, the Panglossian economist has a simple rejoinder: “The current state of affairs would be inefficient, if the relevant parties could bargain or trade to bring about a better outcome. But apparently they cannot. Correcting the so-called problem is too costly. The existence of the problem is efficient, once we take all constraints and all costs, including the costs of bargaining, into account. To claim otherwise is simply to wish that things would be better, a kind of utopian dreaming.” Such an argument can be invoked whether the market or government is cited as the source of the supposed inefficiency. Of course the Panglossian view need not be thought of as especially optimistic in the common sense meaning of that word. We are in the “worst of all possible worlds” as well as in the “best of all possible worlds.”

IV. Practical advocacy

Another response conceives of the problem in purely practical terms. Imagine having the option of advocating a more utopian policy option, or a policy option closer to the status quo. Perhaps we should choose the advocacy that will do the most for our notion of good consequences. Of course in making such a calculation we must consider the respective benefits from each potential change, our chance of making a difference, the chance that

possible world, namely the world we have. The literature on theodicy discusses related question. These writings consider whether God made the "best possible world" and what it means to say that other worlds are possible. See Adams (1987, 1994) and Plantinga (1989). Sometimes economists present a Panglossian claim in modified form, such as “everything we observe in markets is efficient,” “democracies are efficient,” or “everything is locally efficient, albeit not always globally efficient.”

our advice turns out to be wrong, and so on. I will refer to this answer as "practical advocacy."

Note, however, that practical advocacy does not provide a social welfare function with coherent rankings across policy alternatives. Instead it ranks only our personal pronouncements. Practical advocacy tells us what would be most useful or practical for us to say. We can derive the claim "John should advocate X," but this offers no demonstration that X is good, that X is better than Y, that X is feasible, that X is the best feasible outcome, and so on.

Practical advocacy does not restrict us to making true claims and indeed is likely to suggest a large number of patently false claims. Arguably all societies are based on myths and legends in religious, political, and ethnic realms. It may, for instance, be desirable to go around claiming that wrongdoers will be sent to the fires of hell. It does not follow that we should create such tortures for wrongdoers, were we able to. Nor does it follow that such tortures exist. Yet talking about such tortures, and endorsing them, may help inculcate morality. Similarly, political order may require that many people have false beliefs about the sanctity of their nation-state. Nations would find it much harder to defend themselves in wartime under fully accurate and realistic beliefs about the morality of war. The point is not to debate the empirical relevance of these examples, but rather to show that advocacy and goodness are conceptually distinct. There is in principle a conceptual gap between an argument for advocating a policy and an argument for the policy itself. We can find many cases where false advocacy will lead to good results, yet we do not, in our final account of things, wish to endorse what is being advocated.

Practical advocacy also leaves us with the possibility of conflicting recommendations. It will sometimes suggest that different individuals should advocate conflicting policies and philosophies. For instance, perhaps Robert Nozick had beneficial influence on one area of economic policy, and John Rawls had beneficial influence on another area. Practical advocacy must then be comfortable with the scenario of Nozick pushing a libertarian line,

Rawls pushing a more redistributionist attitude, and no overarching perspective to adjudicate one position as being correct and the other false.

Practical advocacy is surely an important consideration. We should not waste our time promoting policies or world-states that cannot possibly happen. We should concentrate our efforts in areas where we can do some good. But practical advocacy does not offer a comprehensive account of normative social choice in light of difficult questions about feasibility. I therefore turn to the next alternative at hand.

V. A two-dimensional social welfare function

The most plausible approach takes both desirability and feasibility into account. When choosing a political point of view, we care how a specified world-state stands in both rankings, as portrayed in section II. Yes our preferred outcome should be desirable, but there is some limit to how utopian we are willing to be. We can think more generally of a positive valued function that reflects the importance of both values:

- (1) Best feasible $X = f(\text{desirability}, \text{feasibility})$, with both values entering positively into the function.

We typically divide political disagreements into disagreements about matters of fact and disagreements about values. But we now have a new possibility, namely disagreements about feasibility.⁸ Let us see how this can play out in a concrete example.

⁸ Of course under “modal realism” (Lewis 1986), disagreements about feasibility are in a deep way disagreements about matters of fact. Even if we accept these views, disagreements about feasibility involve disagreements about a very different kind of fact. Rather than debating whether the minimum wage boosts unemployment, we are debating the (possibly factual) question of which policy options are too utopian to be taken seriously.

I will start with classical liberalism vs. social democracy, two convenient and commonly understood categories, but the argument is more general than any particular comparison. The overall desirability rankings might look like this:

“Most desirable” rankings:

1. Oceans with lemonade and no scarcity
2. Social democracy with relatively wise and benevolent rulers
3. Classical liberal polity as it operates when found

Both the classical liberal and the modern liberal could well agree on this ordering. That is, the classical liberal might agree that a sufficiently competent and benevolent government could indeed outperform an alternative with smaller government and greater reliance on the market. Nonetheless the classical liberal probably will not endorse #2 as the best feasible alternative. The disagreement may boil down to feasibility rankings and weightings. To see this more clearly, consider some feasibility rankings:

“Most to least utopian” rankings:

1. Oceans with lemonade and no scarcity
2. Social democracy with relatively wise and benevolent rulers
3. Classical liberal polity as it operates when found

Again, both the classical and modern liberal might agree on these rankings in broad terms. Nonetheless we can observe two sources of disagreement, thereby providing reasons why the classical liberal prefers #3 and the modern liberal prefers #2. First, the classical liberal might place greater weight on feasibility than does the modern liberal. That is, the classical liberal might discriminate more heavily against #2, on the grounds that it requires some improvement in governance capabilities.⁹ Second, the classical

⁹ I do not mean to suggest that modern liberalism is intrinsically a more utopian position than is classical liberalism. The example is illustrative, and the positions could easily be

liberal might believe that #2 is very utopian. In contrast the modern liberal will more likely see “relatively wise and benevolent rulers” as more or less within our grasp, even if current rulers are not perceived as wise and benevolent.

The general claim is not that the feasibility dimension constitutes the entirety of all political differences. Real world disagreements are complex and multi-dimensional. Nonetheless it remains the case that differing views on feasibility suffice to generate significant political disagreements, even when the parties agree on all other relevant facts and values. In this regard the “feasibility dimension” of social choice is an important one.

Note that the result does not require the disagreeing parties to share common rankings about the degrees of utopianism for various alternatives. In reality, each side to the debate is likely to believe that its favored vision is not very utopian, and that the other side is excessively utopian. But the argument still goes through as stated, namely that differences about feasibility suffice to explain significant political disagreements.

We also might find that two economists agree on each and every particular predictive claim. If we ask "will repealing this tax increase wealth?", and numerous other questions of this kind, we might get the same answer from each economist. The two economists nonetheless may hold very different political views, disagreeing on the overall scope of policy and political philosophy. Implicitly they may have different mental models of what is feasible and how much feasibility should count in our overall evaluations. They will therefore identify very different outcomes as the "best feasible world-state."

The ambiguity of defining constraints is not entirely new to economic reasoning. In practice the economist typically makes a methodological decision to treat some variables as "given" and others as "free," depending on what feature of the real world he is trying to shed light on. However useful this approach may be for positive science, taken alone it

reversed, with the classical liberal favoring some further change in the world that would give markets greater scope or effectiveness than they currently have.

leaves many normative questions unresolved. Different outcomes will be the "best feasible alternative," depending on methodological decisions to take differing variables as free or given.¹⁰

Consider the problem graphically. Standard theory postulates a single budget constraint coexisting with indifference curves, as represented by the following: (see figure 1)

In reality we have a fuzzy budget constraint, which looks more like the following: (see figure 2)

The new budget constraint is a band of some kind. In general the band gets darker as we move outwards to the right. This reflects feasibility as a matter of degree and that the more ambitious possibilities are in general less feasible. Of course the degree and extent of the darkening pattern will depend upon the details of how feasibility differs by degree. Arguably some of the graphed area stands outside the band, at least if common sense can reject some options as categorically infeasible, as discussed above. If we do not find this invocation of common sense acceptable, the band will never end but rather will continue to darken as we move upwards and to the right.

Social choice theory

¹⁰ If we recall the traditional Chicago school model of constant tastes, Stigler and Becker (1977) try to redefine many (all?) instances of changing tastes as changing constraints. For instance it is commonly asserted that listening to classical music increases a person's taste (appreciation) for that kind of music. Instead of postulating a change in tastes, Stigler and Becker suggest there has been a decline in the cost of producing musical enjoyment through subsequent listening. Which perspective is correct? Has there been a change in tastes or a change in constraints? Most likely, the two perspectives are not citing different facts about the world or disagreeing about any empirical reality. Instead the question is how to categorize a set of commonly understood changes. One approach or the other may be analytically superior, and more useful, but there is no fact of the matter as to whether we have "a change in tastes" or "a change in constraints" (Cowen 1989). In other words, there is not always a "fact of the matter" in defining what is a constraint. The arguments of this paper simply extend this insight in a different direction.

Normative social choice will be complex in this environment. Arrow's Impossibility Theorem starts with an assumption of universal domain. In other words, the feasible options already stand as a well-circumscribed set. But once we treat feasibility as a matter of degree along some margins, this assumption collapses. The relevant domain is a fuzzy band, rather than a well-defined budget constraint or a clearly listable set of options.

Public choice theorists have long been suspicious of Arrow's framework, with its central planner-like invocation of a menu of known possibilities. The universal domain axiom seems to imply a god-like function for the government or the social choice mechanism. It is often suggested that we should instead ask whether known social choice mechanisms select well from the universe of the feasible, rather than from all possible preference alignments (Tullock 1967). As argued above, perhaps we can rule out some world-states as strictly infeasible on grounds of common sense. This would transform the Arrow problem, and land us square in the issues discussed in this paper.

Note that feasibility "differences in degree" may make Arrow's theorem, or corresponding intra-profile impossibility theorems (Kemp 1976, Ng 1976), inapplicable in broader settings. Arrow-like theorems typically require strict assumptions that only information from ordinal preferences can be used to construct a social welfare function. But we now have a new source of information for the social welfare enterprise, namely feasibility information. Once new information is allowed into the construction of the problem, typically we are no longer able to prove impossibility theorems. Tullock's criticisms of Arrow therefore receive some vindication, albeit through an indirect route.

That being said, the implications of invoking feasibility are more radical than is often realized. Since many feasibility judgments are those of degree, we do not move simply to an infra-profile version of Arrow's problem with some options ruled out. Instead we require a welfare function weighing both desirability and feasibility.

I will not, in this paper, suggest any particular construction for such a social welfare function. This would require a more systematic treatment of issues in ethics and meta-ethics than could be offered in a single paper. But on the bright side, we should not expect the construction of such a function to encounter any Arrowian dilemma. Arrow's theorem relies crucially on the restrictive use of ordinal preference information. The impossibility of irrelevant alternatives axiom prevents us from using any kind of cardinal information to resolve potential disputes. In contrast, our discussion of the feasibility concept suggested it is based very roughly on a kind of cardinal information. We can make very rough judgments about how much more feasible one alternative is than the other. In other words, we can invoke a very rough kind of "feasibility cardinality." And given the use of this information, we should not expect to encounter an analog of the Arrow problem in our new setting.

More generally, this paper is not intended as a nihilistic message. In fact my goal is to defang nihilism and bring about greater political agreement at some higher meta-level. If we do not deal with feasibility dilemmas, political agreement can be impossible to generate, as demonstrated above.

I think of this enterprise as starting with the fact of persistent disagreement, and working to eliminate that disagreement by examining how greater consensus might come about. Recognizing the existence of a two-dimensional social welfare function is one brick – albeit only one brick – in that broader problem. So while I cannot offer a generalized method for approaching or solving such social welfare functions, we have taken one net step in the direction of knowledge and greater agreement on normative issues.

VI. Concluding remarks

To sum up, the implications for normative economics are several. It has long been known that social choice theory should not simply start with universal domain, but rather integrate questions about feasibility. Yet moving toward this approach brings some additional, hitherto-neglected conclusions:

1. Whether an option stands in the relevant domain is often a question of degree rather than of kind, at least under current knowledge.
2. To identify the “best feasible outcome,” we need to debate the trade-off between feasibility and desirability. There is no simple way to designate a “best feasible outcome” without making such a trade-off.
3. Facts and values do not exhaust all possible sources of political disagreement. Recognizing this would improve the quality of policy debate.
4. Different views on feasibility suffice to generate substantial disagreements, although of course they do not exhaust such disagreements.
5. While this inquiry suggests some new normative challenges, and perhaps some greater agnosticism on some questions, we also are left with some paths toward greater knowledge.

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