

## Instrumentally Rational Myopic Planning

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**Abstract:** I challenge the view that, in cases where time for deliberation is not an issue, instrumental rationality precludes myopic planning. I show where there is room for instrumentally rational myopic planning, and then argue that such planning is possible not only in theory, it is something human beings can and do engage in. The possibility of such planning has, however, been disregarded, and this disregard has skewed related debates concerning instrumental rationality.

### 1. Introduction

What are the requirements of reason when it comes to making decisions and acting? One must, of course, be instrumentally rational. But what exactly does being instrumentally rational involve? And what, if any, requirements of practical reason are there in addition to the requirements of instrumental rationality? Debate concerning this last question has a long history in philosophy. Think, for example, of the ancient debate in Plato's *Republic* concerning whether the requirements of justice are requirements of practical reason. Debate concerning the requirements of instrumental rationality is, by contrast, a relatively recent development. Included among the most influential agitators are David Gauthier and Edward McClennen. Both Gauthier and McClennen reject the traditional assumption that instrumental rationality calls for straightforward maximization in favor of the view that instrumental rationality calls for some form of constrained maximization.<sup>1</sup> Unlike a straightforward maximizer, a constrained maximizer will sometimes stick to a prior intention even if she could do better (relative to her concerns) by abandoning the intention. Otherwise put, constrained maximizers exhibit a sort of resoluteness that straightforward maximizers lack.

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<sup>1</sup> See, for example, (Gauthier 1994) and (McClennen 1997).

Like Gauthier and McClennen, I want to spark debate concerning the nature of instrumental rationality. But my aim is not to jump in with some novel defense of either straightforward maximization or constrained maximization. Rather, my aim is to challenge a seemingly modest view that has yet to be the object of much suspicion, but that has, though it is rarely made explicit, contributed to shaping—or rather misshaping—current debate concerning instrumental rationality. The view concerns myopic planning, which involves forming a future-directed intention without thinking about what things will be like for one when the time to carry out the intention arrives. According to the view I aim to challenge, instrumental rationality precludes myopic planning, at least in cases where time for deliberation is not an issue. (Note that this last clause will henceforth be left implicit.) After providing a limited defense of the coherence of the idea of myopic planning, I will argue that the possibility of a certain sort of instrumentally rational agent—a belief-economizing sort—threatens the view that instrumental rationality precludes myopic planning. I will then put forward a couple of examples that will, I hope, reveal belief-economization as a very familiar phenomenon. The conclusion I will draw is that *instrumentally rational* myopic planning is possible, and not just in theory—it is something we human beings can and do (at least sometimes) engage in. Ultimately, my aim is to improve our understanding of ourselves and of the requirements of practical reason.

## II. Instrumentally Rational Agents

As I will understand the notion of an instrumentally rational agent, instrumentally rational agents are reflective. They have conscious goals and reason well in their pursuit of these goals. Instrumentally rational agents need not, however, be highly self-reflective. In particular, one can be instrumentally rational without having a conception of oneself as instrumentally rational in mind. I take it that to suppose otherwise would be to favor an over-intellectualized conception of the instrumentally rational agent.

## III. Myopic Planning

In myopic planning, one plans ahead without really thinking ahead. In other words, one forms an intention without forming judgments concerning the following: (i) whether one's situation and motivations combined will be conducive to one's carrying out one's intention when the time for action arrives; (ii) whether one's situation and motivations combined will favor one's carrying out one's intention when the time for action arrives. A myopic planner is thus prone to forming intentions that it is easy to see he will not carry out, as well as intentions that it would be instrumentally irrational for him to carry out. Here is an example of myopic planning: I form the intention to finish writing a paper tomorrow, when just a little future-oriented reflection would reveal that I will not finish writing my paper but will instead do a series of chores that desperately need to get done. Furthermore, it is not that I am harboring the false belief that I will have time for plenty of chores and plenty of writing tomorrow—if I were, I would be not so much myopic as mistaken. Rather, I have formed my intention without clearly focusing on (what things will be like for me) tomorrow.<sup>2</sup>

## IV. Intentions

My aim is to show that instrumental rationality does not preclude myopic planning. But there is a worry that needs to be addressed first. The worry, which is suggested by two influential views concerning intention, is that the idea of myopic planning is incoherent. The two influential views I have in mind are the following:

- (1) Having the intention to X implies having the belief that one will (probably) X.<sup>3</sup>

<sup>2</sup> Note that there is a difference between 'discounting future utility' and myopic planning. Discounting future utility involves giving less weight to one's future (or distant) good than to one's current (or near) good. Whether discounting future utility fits with being instrumentally rational is a question that I will not consider here.

<sup>3</sup> For an influential analysis of intention incorporating this view, see (Audi 1973).

- (2) Having the intention to X implies judging that it would be desirable for one to X.<sup>4</sup>

If (1) is correct, then having the intention to X seems to go hand in hand with judging that, when the time for action arrives, one's situation and motivations combined will be conducive to one's X-ing. If (2) is correct, then having the intention to X seems to go hand in hand with judging that, when the time for action arrives, one's situation and motivations combined will favor one's X-ing. So if either (1) or (2) is true, the idea of myopic planning is arguably incoherent.

There are, however, compelling counterexamples to both (1) and (2). Let us start with (1). To borrow two examples from Michael Bratman, 'I [might] intend to carry out a rescue operation,' while having serious doubts about whether I will succeed, because the operation 'requires a series of difficult steps'; or 'I might intend now to stop at the bookstore on the way home,' while recognizing that, given 'my tendency toward absentmindedness,' I may well forget to make the stop (Bratman 1987, 37-8). These examples suggest the possibility of 'intention-belief incompleteness,' wherein one intends to X but is agnostic about whether or not one will actually X (and sometimes even about whether one will try to X or be capable of X-ing given the facts about oneself and one's situation).

Note that while I would deny that having the intention to X implies having the belief that one will (probably) X, I am willing to grant that one cannot form the intention to X if one is sure that one will not X. I will refer to this constraint on intention as *the negative belief constraint*. For all I say in this paper, it may even be true that one cannot form the intention to X if one believes that one will *probably* not X. (I hasten to add, however, that I find this view much less compelling than the negative belief constraint.)<sup>5</sup>

With respect to (2), consider the following odd scenario, which is

4 For an influential analysis of intention incorporating this view, see (Davidson 1980).

5 For enlightening discussion concerning these views, see (McLe 1989).

closely related to a scenario described by Howard Sobel in 'Useful Intentions'.<sup>6</sup> You ask me to touch my nose. I ask 'why?' You say, 'no reason'. I don't bother complying with your request. You then tell me that if I form the intention to touch my nose as soon as you raise your hand, you will give me \$10. You explain that I need not actually touch my nose to get the money. I simply need to form the intention to touch my nose when you raise your hand. As soon as my intention is formed, your intention-detecting machine will beep and I will get my money, regardless of whether or not I actually touch my nose when you raise your hand. I briefly consider your strange offer, I form the intention to touch my nose when you raise your hand, your intention-detecting machine beeps, and you hand over \$10. Though this is a very strange scenario, it does not seem impossible. If it is possible, we have a counterexample to (2), since, in the example, I am able to form the intention to touch my nose when you raise your hand, even though I do not judge that it would be desirable for me to touch my nose when you raise your hand. My intention is prompted by the prospect of being rewarded for forming the intention (and perhaps by a desire to see your intention-detecting machine in action), not by any desirable feature of the intended act.

If (1) or (2) were true, the idea of myopic planning would, it seems, be incoherent. But the cases I have described suggest that (1) and (2) are false. Obviously my appeal to these cases does not constitute a thoroughly developed defense of the idea of myopic planning against (1) and (2). No such defense will be provided here. For the purposes of this paper, I will henceforth assume that the idea of myopic planning is coherent, and that myopic planning is, thus, possible. Taking this for granted, the question I will focus on answering is whether myopic planning is possible for the *instrumentally rational agent*.

6 See (Sobel 1994).

## V. Myopic Planning and the Toxin Puzzle

Let A be an instrumentally rational agent (who is not under the influence of hypnosis or the like), and keep in mind that if A's X-ing would be irrational, then A will not X. According to the view that instrumental rationality precludes myopic planning, if A is not pressed for time and if just a little future-oriented reflection would convince A that she will not X, then A will not—indeed, cannot—form the intention to X. To get a sense of this view's influence on debates concerning instrumental rationality, it is useful to look, for example, at the debate surrounding Gregory Kavka's famous toxin puzzle.<sup>7</sup> (Like the last, strange case I described in the previous section, Kavka's case is an *autonomous benefit case*. In autonomous benefit cases, there is an action X such that forming the intention to X benefits the agent regardless of whether the agent actually X-s.)

In Kavka's invented case,

an eccentric billionaire ... places before you a vial of toxin... [You are provided with the following information:] If you drink [the toxin], [it] will make you painfully ill for a day, but will not threaten your life or have any lasting effects.... The billionaire will pay you one million dollars tomorrow morning if, at midnight tonight, you intend to drink the toxin tomorrow afternoon.... You need not drink the toxin to receive the money; in fact, the money will already be in your bank account hours before the time for drinking it arrives, if you succeed.... [The] arrangement of ... external incentives is ruled out, as are such alternative gimmicks as hiring a hypnotist to implant the intention.... (Kavka 1983, 33-4)

The puzzle, in part, raises the question of whether an instrumentally rational agent could, in the strange situation Kavka describes, form the intention to drink the toxin. There are two main lines of response to the puzzle. Some argue that drinking the toxin is irrational and conclude that instrumental rationality is an obstacle to forming the intention to drink the toxin.<sup>8</sup> Others argue that drinking the toxin is rational and conclude that instrumental rationality is not an obstacle to forming the

<sup>7</sup> See (Kavka 1983).

<sup>8</sup> See, for example, (Bratman 1999).

intention to drink the toxin.<sup>9</sup> While the idea that drinking the toxin is irrational fits with the traditional assumption that instrumental rationality calls for straightforward maximization, the idea that drinking the toxin is rational rests on the contention that instrumental rationality calls for constrained maximization (and, more specifically, for sticking to intentions that one did well to form and that one would not have been able to form without the resoluteness characteristic of a constrained maximizer). Both lines of response fit neatly with the idea that if instrumental rationality prohibits drinking the toxin, then (barring hypnosis and the like) the instrumentally rational agent will not drink the toxin, will foresee this, and so (given the negative belief constraint on intention) will not be able to form the intention to drink the toxin.

Conspicuously missing is any discussion of the possibility that even if instrumental rationality prohibits drinking the toxin, the instrumentally rational agent may be able to *myopically* form the intention to drink the toxin. This is an interesting and significant omission since, as will soon become apparent, autonomous benefit cases, like the toxin puzzle, can actually be used to support the possibility of instrumentally rational myopic planning. And if instrumental rationality does not preclude myopic planning, then there is room for the following neglected combination: (i) drinking the toxin is irrational, but (ii) instrumental rationality is not an obstacle to forming the intention to drink the toxin.

## VI. The Belief-Economizing Agent

I turn now to a description of the *belief-economizing agent*, who will figure in my defense of the possibility of instrumentally rational myopic planning. As the label suggests, the belief-economizing agent will be thrifty when it comes to forming beliefs. More specifically, she will make predictions about her future choices and actions when and only when predictions concerning these future choices and actions are required by

<sup>9</sup> See, for example, (Gauthier 1994).

instrumental rationality, and she will refrain from making ungrounded or inadequately grounded assumptions about her future choices and actions. She will thus be thrifty without being stingy to the point of being criticizably short-sighted. Suppose, for example, that she is interested in investing some money in bond fund B. Suppose further that she will face a stiff penalty if she removes her money within six months. Then, other things equal (and assuming, in particular, that she does not want to face a stiff penalty), she will, before deciding whether to invest her money, predict whether, if she invests her money now, she is likely (to have reason) to remove it within six months. If, however, things were different and she could conveniently remove her money whenever she wanted and without penalty, then, other things equal, she would not expend the mental resources necessary to predict whether, if she invests her money now, she is likely (to have reason) to remove it within six months: nor would she simply accept an ungrounded or inadequately grounded assumption concerning whether, if she invests her money now, she is likely (to have reason) to remove it within six months.

Notice that the belief-economizing agent can reason well in pursuing her goals, taking into account what needs to be taken into account as she proceeds, without thinking in terms of the concept of instrumental rationality. Relatedly, the belief-economizing agent can take into account what needs to be taken into account as she proceeds, without thinking about what she is doing in these terms. Her attention can be directed by her goals without her having thoughts like 'What does instrumental rationality require of me now?' or 'What do my goals call for now?' Her thoughts can focus directly on her options and their consequences. They can be thoughts like 'If I invest this money now, and then remove it in three months, I will face a stiff penalty.'

### VII. The Belief-Economizing Agent and the Toxin Puzzle

Why does the possibility of the belief-economizing agent threaten the view that instrumental rationality precludes myopic planning? Well, as we have already seen, there are cases—like Kavka's toxin case—in which

forming the intention to perform a certain action, say to X, will greatly benefit an agent even though actually X-ing will conflict with the agent's concerns. In at least some such cases, the belief-economizing agent will be able to engage in myopic planning. Take Kavka's toxin case. Prompted by the consideration that forming the intention to drink the toxin will get her a million dollars, and without expending the mental resources necessary to predict whether or not she will (or is likely to) actually drink the toxin (or have reason to drink the toxin) when the time for action arrives, the belief-economizing agent will, in the situation Kavka describes, form the intention to drink the toxin. Because she benefits from forming the intention to drink the toxin whether or not her intention will ultimately lead her to drink the toxin, instrumental rationality does not require her to predict, before forming her intention, whether she will (or is likely to) carry out her intention (or have reason to carry out her intention) when the time for action arrives. Her brand of thriftiness—which is not a form of criticizable stinginess—will thus prevent her from making any such prediction (including an ungrounded or inadequately grounded prediction). The belief-economizing agent will thus be able to form the intention to drink the toxin even if just a little focused reflection on what things will be like for her when the time for action arrives would convince her that she will not drink the toxin. As such, though she is not criticizable from the point of view of instrumental rationality, the belief-economizing agent can engage in myopic planning.

Note that if the following two sets of facts coincided, then my view that the belief-economizing agent can engage in myopic planning in the toxin case would be threatened: the facts that reveal forming the intention to drink the toxin as beneficial regardless of whether one's intention ultimately leads one to drink the toxin; the facts necessary for a prediction about one's drinking the toxin. For if these two sets of facts coincided, then attending to the former would amount to attending to the latter. But the two sets of facts do not coincide. To see that this is so, note first that the following set of facts reveals forming the intention to

drink the toxin as beneficial regardless of whether one's intention ultimately leads one to drink the toxin: one will get a million dollars if one forms the intention to drink the toxin; the negative effects of drinking the toxin are relatively minor, and so, whether or not one's intention persists and leads one to drink the toxin, one benefits from forming it. This set of facts, however, does not suffice for a prediction concerning one's drinking the toxin. Additional features of the situation and of oneself need to be attended to and synthesized for such a prediction. And, as I have already suggested, the belief-economizing agent will not engage in further reflection aimed at making such a prediction.

There are two further points that it is very important to keep in mind: First, my interest is in defending the conclusion that the belief-economizing agent can (in certain cases) engage in myopic planning, not in finding a solution to all the worries and questions raised by Kavka's toxin puzzle. In particular, my argument that the belief-economizing agent can engage in myopic planning in the toxin case is not being put forward as a solution to the toxin puzzle. Whether there is enough here for the construction of an acceptable and complete solution to Kavka's puzzle is a question that I will not consider.

Second, recall that, as I am conceiving of instrumental rationality, the instrumentally rational agent need not be highly self-reflective. So long as an agent reasons well in pursuing her goals, taking into account what needs to be taken into account as she proceeds, then the agent is instrumentally rational, even if she proceeds without much self-reflection. It may be that for certain highly self-reflective agents, myopic planning is not possible. Consider, for example, an agent who conceives of herself as instrumentally rational, has a theory—indeed the correct theory—of instrumental rationality, and invariably has both the conception of herself as rational and her theory of rationality at the forefront of her mind when forming intentions and acting. Suppose further that the correct theory of instrumental rationality calls for straightforward maximization. Then it is arguable that the agent in

question could not myopically form the intention to drink the toxin. For, given that she knows that she is instrumentally rational, and given that it is transparent relative to her theory of instrumental rationality—which is at the forefront of her mind—that drinking the toxin would not be instrumentally rational, she will be sure that she will not drink the toxin. But the instrumentally rational agent need not resemble the agent just described. So there is room for instrumental rationality and myopic planning to coexist.

Note that when an agent is facing a situation in 'real life', rather than encountering a (perhaps structurally similar) situation in a work of philosophy, the agent's reflectiveness is likely to be relatively low-level and practically focused. Encountering a situation in a work of philosophy invites highly reflective, theoretical engagement and brings (via description, which is by its very nature selective) various theoretically interesting features of the situation into sharp focus—including, oftentimes, features that, from the point of view of instrumental rationality, need not be attended to.

### VIII. Where Do We Fit In?

My argument, in a nutshell, is as follows:

There is a sort of belief-economizing agent that is both instrumentally rational and capable of myopic planning.

Therefore, instrumental rationality does not preclude myopic planning.

But are human beings anything like the belief-economizing agent I have described? I doubt that we are relentlessly economical when it comes to belief formation. Still, we seem to be at least somewhat economical. Here are two familiar examples of belief-economization:

*Example 1:* A couple of nights a week, I form the intention to watch only one television program before going to bed. When I don't have to get up early the next morning, I typically form my intention without expending the mental resources necessary to predict whether I will, if I

plop myself down on the couch, actually watch a single program and then go to bed. (From the point of view of instrumental rationality, this bit of economization seems to make sense. For, assuming that it is no big deal if inertia leads me to stay up a bit late, and that I am better off staying up a bit late than not watching any television at all, instrumental rationality does not require me to predict whether I will, if I plop myself down on the couch, actually watch a single program and then go to bed.)

*Example 2:* While anxiously waiting for a bus that I realized I might have already missed, I swore to myself that I would henceforth give myself more buffer time before important appointments. I did this without expending the mental resources necessary to predict whether I would stick to my resolution. (Again, from the point of view of instrumental rationality, this bit of economization seems to make sense. For, assuming that it doesn't hurt to make the resolution (whether I stick to it or not), instrumental rationality does not require me to predict, before making the resolution, whether I will actually stick to it if I make it.)

### IX. Conclusion

We are left with two conclusions: (1) As is demonstrated by the possibility of the belief-economizing agent, an agent can be instrumentally rational and yet still engage in myopic planning. (2) Though we human beings may not be as relentlessly economical as the idealized belief-economizing agent that I described in section VI, belief economization is a familiar phenomenon, and so *instrumentally rational* myopic planning is a real possibility for us.

This possibility has been disregarded, even by philosophers familiar with autonomous benefit cases, like the toxin case, which actually support the possibility of instrumentally rational myopic planning. This disregard has skewed debates surrounding autonomous benefit cases, including debates concerning how instrumental rationality is best modeled given autonomous benefit cases. Missing is the recognition that, even when time is not an issue, thinking one's plans through is not

always the thing to do.

Life would be impossibly overwhelming if we didn't largely attend to things on a need-to-know basis. In some cases myopic planning is the result. From the point of view of instrumental rationality, this is simply not a problem. Indeed, it's ideal.<sup>10</sup>

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