

MAKING GOOD CHOICES: AN INTRODUCTION TO PRACTICAL REASONING

PREFACE:

This text is intended to contribute to the broad effort at teaching reasoning. In the philosophy curriculum the focus of that effort is on critical reasoning, primarily inference evaluation and argumentation skills. Regrettably, practical reasoning has largely been neglected. Practical reasoning is the reasoning that leads to a decision what to do. This text offers an elementary introduction to some of the basic methods of practical reasoning and an application of these methods to a variety of decision problems. The aim is to provide students with techniques to frame, analyze, and evaluate decisions of increasing complexity, and to give students practice working with this system on decision problems that are realistic. “Evaluate” means, in this context, justifying a choice as rational and recognizing why other choices would be irrational. This has been done here by accepting (uncritically) and applying certain principles from rational choice theory, in the same way that critical reasoning evaluates natural language arguments by accepting (uncritically) and applying certain principles from logic. Briefly comparing critical and practical reasoning will, perhaps, provide a context for the broad plan and expectations for this text.

In the philosophical tradition going back to Aristotle, practical reasoning is held to be distinct from “theoretical” or “epistemic” (critical) reasoning; the former is concerned with actions while the latter is concerned with beliefs. As critical reasoning employs a variety of methods to form, analyze, and evaluate natural language arguments, practical reasoning likewise uses a variety of methods to frame, analyze, and evaluate decisions. The principles and standards of rationality by which critical reasoning makes and evaluates arguments come from logic. According to these standards, some beliefs are well supported, the arguments are good: they are valid, while other beliefs are poorly supported, the arguments are bad: they are fallacies. Similarly, the principles

and standards of rationality by which practical reasoning makes and evaluates decisions come from the theory of rational choice (here, primarily decision theory and game theory). According to the standards provided by this theory, some decisions are good: they are rational choices, while others are bad: they are irrational choices. In each case, then, we find a system of application (making, analyzing and evaluating) and a foundation of justifying principles (for critical reasoning skills: logic, and for practical reasoning skills: rational choice theory). Students study critical reasoning with the expectation that it will make them better at reasoning in the context of arguments and holding beliefs. This text is based on the beliefs that rational decisions are at least as important to make as valid arguments are, and that by learning some of the principles of rational choice and methods of practical reasoning, and gaining skill at applying these principles and methods to a variety of decisions problems, students will become better at reasoning in the context of making real-life decisions.

The first chapter presents two central working assumptions that guide the rest of the text: that practical reasoning is primarily instrumental, a form of means-ends reasoning (as opposed to premise-conclusion reasoning), and that the methods of practical reasoning and principles of rational choice can (and will) be understood normatively. With these assumptions in place, subsequent chapters introduce the standard vocabulary for talking about decisions and a simple diagram technique for displaying a decision problem. Within rational choice theory decisions have been categorized and described using more-or-less established terms and models, many of which have entered the national and the international public discourse. Examples include “options,” “risk,” “outcomes,” “goals,” “zero sum game,” “win-win situation,” “objectives,” and “strategy.” Becoming comfortable in the use such vocabulary will give students a sufficiently rich decision-language to express their own opinions, and to understand the opinions of others, about decisions of interest.

The concept of goals plays a large role in this text both as an anchor for practical reasoning and as an organizing theme as more complex decisions are covered. (This reflects the influence

throughout this text of Amartya Sen.) Simple vs. complex goals serve as an intuitively more familiar stand-in for single vs. multi-criteria (attribute) decisions. Chapter 2 is primarily concerned with the centrality of goals, the distinction between simple and complex goals, and the valuation of objectives. The remaining chapters are organized as follows (blank areas mean that the type of decision in question is not covered systematically).

	<u>Simple goals</u> (single-criterion)	<u>Complex goals</u> (multi-criteria)
Decisions under certainty	chapter 3	chapter 4
Risky decisions	chapters 5 and 6	chapter 7
Decisions under ignorance	chapter 8	
Satisficing	chapter 8	
Interdependent decisions	chapters 9, 10, 11, and 12	
Bargaining and negotiations	chapter 13	chapter 13

Competitive and cooperative interdependent decisions (chapters 9 – 12) are not treated as abstract game structures, but are approached through concrete examples requiring students to apply the concepts and methods of analysis and evaluation practiced in earlier chapters, as well as those introduced as specific to interdependent decision-making. Chapter 13 introduces a basic bargaining and negotiations framework for transforming certain troubling cooperative decisions into bargaining problems and offers a set of principles for deciding solutions.

Chapter 14 covers “common fallacies” of practical reasoning – patterns of irrational choice that we seem prone to make. They all have a common form: an agent has a goal and the agent’s menu of available options contains at least one that, if chosen, would best achieve the goal compared to the other options in the menu, and the agent fails to choose it. In covering common patterns of poor decision making, the hope is that students will be on guard to avoid them, especially those to which a student feels particularly vulnerable in her own decision-making.

Even though it is placed last this chapter, consistently a favorite with students, is free-standing and can be used at any point in the text; I typically introduce it early on (after chapter 2) because the topic, valuable in itself, nicely acts as a “hook” for some students who might not have fully committed to a (another) reasoning course.

It is not easy to say how studying a reasoning text will actually improve a person’s reasoning ability. Of course, there is no guarantee that it will. In this regard, this text’s aims are relatively modest. In the case of critical reasoning, texts are not taught in the expectation that students in actual argumentative situations, out of the classroom setting, will take (or even have) time to formally analyze and technically evaluate arguments. Rather, the hope is more that they will internalize a set of broad ideas and ideals concerning rationality that helps raise their standards, sharpen their intuitions, and provide self-confidence in their abilities when engaged with arguments. Similarly, this practical reasoning text is not meant to result in students constructing decisions diagrams or game matrixes, calculating expected utility, or drawing bargaining graphs in their actual daily decision situations. Instead, the aim is to provide a broad background of ideas and ideals, internalized more by application and practice than by learning about theory, in terms of which actual decisions will be thought about. The idea, for example, that there are standards of practical rationality that are in some measure objective and independent of the power of position or popular opinion. Also, the awareness that there exist norms and methods by which choices can be evaluated and justified, one’s own as well as those of others’, should the occasion require it. And that, once exposed to the principles of practical reasoning, students inherit an intellectual obligation to be more careful and demanding reasoners in deliberating about what to do. This text, then, is intended to raise the general level of expectation, primarily self-expectation, in subtle and incremental ways concerning the effort to make rational choices.

Toward this end, theory and practice have been coordinated, and naturally both have had to be compromised. The theory is intended only to provide students with a conceptually minimal base sufficient to understand what they are doing as they work through decision problems and justify

choices. This is primarily a skills text, in the sense that a way of thinking about and making decisions is learned more by practice than by covering a set of concepts. The theory, with few exceptions, is limited to serving skill acquisition. The practice takes place first by way of decisions that are worked on in the chapters. These serve to illustrate the methods. Second, exercises provide students with a variety of decisions to work out on their own. For the purposes of this text, working with a system for analyzing and evaluating decisions is crucial. Practical reasoning, like any skill, requires practice if it is to be done well. Using the principles and methods to frame and evaluate realistic decisions is challenging, but the task is made easier by starting with simplified, somewhat unrealistic cases, fabricated for the purpose at hand, and adding complexity and realism as understanding and skill sink in. The examples and exercises have been designed with this movement from the “idealized” to the “realistic” decision problem in mind. After each section in which a new level of complexity is introduced, a summary is provided of the main steps involved in framing and making a good decision on that level. With respect to the exercises, I have had excellent results overall with group work. Teams of three students, who typically remain together through the course, select decision problems from the exercises as projects. On course evaluations, students consistently give high marks to these team projects. The learning, discussions, collaborative experience, (and fun!) they comment on have only confirmed my belief in the value of group work in practical reasoning, especially as decisions increase in complexity.

As a philosophy text, I have kept to one overarching theme throughout: the nature of practical reasoning as an evaluating and justifying activity in the context of making decisions.

Philosophically viewed, critical reasoning (to continue the comparison above) is neither a method of persuasion nor an explanation of what causes people to believe whatever they believe. It is rather a set of principles and methods for justifying a belief, for showing the degree to which it is rational to hold a belief in light of the evidence. Similarly, practical reasoning – as presented in this text – does not attempt to explain or predict how people make decisions, nor is it a set of techniques for getting people to choose one way or another about what to do. Rather, it is a system of principles and practices for justifying decisions, for showing the degree to which a

decision is a rational choice. The critical task of philosophy, regrettably, is missing and the foundational level had to be neglected. Given the text's primary aim as an introductory-level teaching vehicle, the focus is primarily in the area of application; there is no systematic presentation or examination of basic principles. Philosophical assumptions behind the principles and methods student work with are neither questioned nor critically examined, problems and weaknesses are generally not pointed out, and skepticism about this (or any) system of "rationality" is not initiated. For teaching and learning purposes, philosophically controversial topics that are covered in the chapters are presented as if they were uncontroversial.

The level of this text is very elementary, given the field. I have assumed no background on the part of the student in any area of philosophy, and only minimal familiarity with adding and multiplying decimals in the treatment of risk. The only background required is one I'm confident every student has: experience having made, and no doubt having struggled with, decisions.

The need for an elementary-level practical reasoning text springs from both the importance of decision making in the lives of students, and in our lives generally, and the almost complete absence of texts suitable for this audience. There are a variety of upper undergraduate and graduate level texts presenting and examining rational choice theory that focus on foundational issues and have relatively narrow philosophical interests. There are decision theory texts specializing in, for example, business, financial, or medical decisions written for professionals. There are a wide variety of texts covering game theory from an economic or an evolutionary perspective. All such texts tend to be narrowly focused, technically rigorous, formal works requiring various levels of symbolic logic and mathematics. There are almost no texts whose aim is to introduce students in lower-level reasoning courses to broadly applicable guidelines for making good choices and avoiding bad ones. Critical reasoning courses rarely if ever cover practical reasoning. This means, in effect, that there are no standard basic-level courses in practical reasoning skills, as there now are in critical reasoning skills, and no text-based way of

devoting (part of) a reasoning course to practical reasoning. Perhaps his text can to some extent help fill this gap.

TO THE INSTRUCTOR:

This text is not an introduction to rational choice theory or to a theory of practical reasoning; it would be completely inadequate in this regard. Rather, it is a practical reasoning text, similar to standard lower-level critical reasoning (informal logic) texts in its focus on teaching a set of useful skills and ignoring for the most part reflection on theoretical problems and themes. (The one exception is a brief description of the rationalist-behaviorist debate.) The system students will be working with justifies a decision, in effect, only one level down by a set of principles that are presented as intuitively reasonable and left unexamined. The perspective throughout is that of someone facing a decision who is in need of some standards and guidelines that will help avoid making a bad decision.

There are many opportunities to add material or make refinements in the way topics are covered, or to integrate practical reasoning units into a course traditionally concerned with informal logic/critical reasoning. In keeping with introductory-level reasoning courses, this text maintains a natural language skill-building focus, it attempts to minimize the average student's fear of symbols, numbers and calculations, it tries to keep the material "usable" in the eye of the student, and its range of topics is limited to at most a term's worth.

Most exercises contain decision problems in narrative form that students are asked to analyze and evaluate; a few exercises contain definition or brief essay type assignments. I have not been consistent in placing exercises. In chapters covering levels of skills, they usually come after sections for immediate practice and reinforcement of the skill at issue. In other chapters the

exercises are held until the end so as not to interrupt presentation of the material. In the former case, there is no reason why the exercises can't be held back until later points in the chapter. In the latter case, they can be assigned at earlier points in the chapter as needed.

I urge you to give group work a try. In my experience, three students make an ideal group for working through and presenting selections from the exercises. As a final project, each group writes a practical reasoning paper on a complex decision of their own choosing. My original plan was to have these groups present their project to the class, but I have typically run out of time. Nevertheless, I have consistently had comments on course evaluations on the value and enjoyment of group projects.

Finally, I would be grateful for any suggestions to improve this text, either in the presentation of conceptual material, the examples used in the body of the chapters, or (especially) the exercises.

TO THE STUDENT:

This text offers you a way to think about many past decisions you have had to face, decisions you might be facing now, and future ones you certainly will be facing – a way that will help you sort things out and recognize good choices. As with most texts and courses, however, what you get out of it depends on what you are willing to put into it. I believe that you'll find most of the ideas "friendly," maybe even obvious and common sense in places, even though some of the language might strike you as abstract and perhaps odd. If you are like most of my students, the ideas will be the more fun part of the text: easily absorbed and "making sense." Then comes the application – the skill part. There is just no substitute for the experience of struggling with realistic decision problems, trying to apply nice sounding ideas to situations containing a lot of messy detail. The focus in this text is not on the idea of practical reasoning, as interesting as this is in its own right, but on your gaining the skill of practical reasoning and a way of looking at decisions.

Many decisions you will face in life are complex, filled with messy details. I believe that in the long run you'll appreciate the skill you gain and the standards of decision making you come to accept even more than the ideas you've learned (unless, perhaps, you happen to be a philosophy major!). I can't encourage you enough, in this regard, to work through the examples and the exercises slowly and carefully, and to try to get into the habit of seeing aspects of your real life decisions through the lens of these skills and standards.

You may find some things in this text annoying. For one, I don't repeat on every page the example being worked on; I typically set it up once and then work on it with you over several pages. This means that sometimes you'll have to flip back-and-forth between the page you are reading and the page containing the example being referred to, to remind yourself of the details. This is inconvenient, I know, but it helps keep the overall length (and price!) of the text down.

You may find the pace annoying at times. There are certain ideas and skills that some students seem to struggle with and become quite confused when they try to apply them. They are "slow learners" when it comes to some of the material they are trying to learn. Yet these same students are amazingly quick and smart in grasping and applying other equally complex ideas and skills! For other students, it might be the other way around. What will your experience be? You will no doubt find that parts of this text move too slowly, and other parts too quickly, for you. Part of your contribution to the course using this text is to point these parts out so that your instructor can make appropriate adjustments.

Another thing that may disturb you – and I hope it does! – is that certain ideas will be presented in a chapter as perfectly sensible and without problems, but on reflection (especially if you are philosophically minded) you'll find that they can be called into question and have serious doubts about them raised. This is typical of the way philosophy works: at first something seems perfectly understandable, but then on a deeper level of thought one is thrown into utter confusion. Some students thrive on this intellectual movement from what seems at first like "the right answer" to a

deeper level of “confusion”; but other student can’t stand it, they want to be left with “the right answer” and to move in the opposite direction: from confusion to clarification. I will have given you a very wrong impression if you come away from this text thinking that all is clear and makes perfect sense in the field of practical reasoning and decision making. But it would be equally wrong to come away thinking that there is nothing but confusion when it comes to reasoning, so that one person’s decision is just as good as another’s. As someone who already has a lot of experience struggling with difficult decisions, I trust that you will find a comfortable balance between what enlightens you and what rightly confuses you in this text.

Finally, you will probably reach a point somewhere before the first half of this text is reached, at which you’ll start to think, “Practical reasoning is not worth the effort! Making good decisions is too hard, too involved, too complicated, especially for the everyday kinds of decisions I’m used to making.” You’ll get this idea, if you do, in reaction to two things. First, several of the examples worked on in the earlier chapters are indeed simple everyday types of decisions that would not normally call for the care and precision with which the methods are applied. These examples are meant to provide practice at making good choices using easy, familiar-sounding cases (practice that will later be applied to harder cases), they are not meant to indicate the kinds of decisions you should be sweating over. Second, methods of making good decisions are generally not taught in school, so the topic will no doubt appear unfamiliar. You might be taken aback at first at how involved and precise making good decisions seem to be. If you reach the point of reacting like this to the material you are learning, be patient. Ways of making decisions that at first seem hard, involved and complicated will seem easy, natural and worthwhile once you have some practice behind you; and important decisions that you’ll have to make in life will appear less daunting having learned systematic ways of approaching them. Once you’ve acquired standards of good decision making and know how to go about making a good decision, it’s fine if you think your everyday decisions are not worth the trouble and that you’ll continue to make them as you always have; that’s a mature judgment based on what you’ve learned. This is a far cry from

someone who makes everyday decisions with no such judgment because he or she is unaware of any standards or methods for making good choices.