

# No Problem

by Alex Lowy



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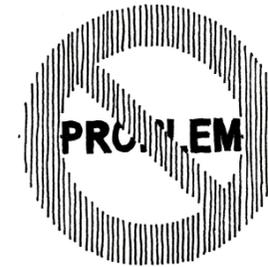
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## Introduction

*IT'S 8:00 am SATURDAY MORNING. My wife is sleeping beside me, catching up on some much needed rest, and I can hear one of the kids moving around downstairs getting ready to head off to his part-time job at the music store. Things overall are fine, but I'm anxious to get started on the day. There's the paperwork I'm behind on, house repairs, aging parents to visit, exercise to fit in, leftover work to complete from the office, kids' homework to help out with...the list goes on. Twenty minutes later hunched over the first of many cups of coffee I will drink during the day, I'm sorting through the laundry list of tasks and challenges in front of me.*

*They're all so different, I'm thinking. Some of them need to be attended to now, like changing the kitty litter. Home repairs and paperwork can be done whenever I get to them. There are a few sensitive problems that will take longer to resolve, and probably won't be completed today no matter how I approach them. And then there are two problems that stand out simply because I've been preoccupied with them for months and nothing I've tried has worked to get them on track. Even though I believe I'm pretty good at solving the hundred and one problems life keeps throwing my way, I can't help but wonder how much better I'd be if I actually knew what I was doing!*

I had my first glimpse of a better way to solve problems almost thirty years ago as a graduate student when I was introduced to a creativity model called Synectics. Synectics breaks all the conventional rules of the scientific method, but it does so in a highly systematic and coherent way. As a student and then as an instructor, I witnessed the impact of a few clear, powerful and (in this case) plainly counterintuitive principles: define the problem and then redefine it, generate lots of ideas, many of them silly ones, build on the silliest ones, never ever criticize when you are sharing ideas, and have fun. In three years, not a single student or client left one of these sessions unsatisfied.

Synectics was just the first of many problem-solving models I encountered. Since then, I have worked with thousands of individuals and hundreds of organizations to help them improve their ability to solve problems. As a consultant and eventually head of a strategic planning firm, I came across all kinds of issues and tried out countless methods and techniques. It never ceased to amaze me that literally every technique we used was capable of adding value, especially when in the right hands. What was that about, I wondered?

My second revelation came three years ago (a long time between revelations, I know) when I began to notice a pattern that occurred each time a client successfully solved a big problem. First there would be a great build-up of tension and anxiety, and then for a period confusion would reign. This lasted until someone, a group member or a consultant, made a proposal to redefine the issue, and when they did this successfully, it was almost always using a form called a 2 x 2 matrix. The problem, they would say, is that we are being torn between X (let's say wanting to realize profits right away), and Y (building towards a better future).

The view that both of the goals could not be attained simultaneously would be vigorously debated and challenged. Great solutions, it turned out, were rarely the result of choosing one or the other of the options; the magic lay in the act of synthesis, creatively finding a way to achieve some of both. Rather than producing the compromises which you might expect, the best

outcomes were always cases where people found a way to transcend the limitations of where they had begun. By this I mean they needed to redefine the problem in order to make progress. In most cases, the new definition took the form of a dilemma.

With my co-author, Phil Hood, I wrote *The Power of the 2 x 2 Matrix* in 2004 to explore this phenomenon and provide example after example of how the architecture of 2 x 2 thinking is imbedded within the world's best design, strategy and personal change methods. For the past couple of years, we have had a lot of fun and success advising organizations on how to creatively apply 2 x 2 principles. Companies have turned around massive losses; individuals have figured out what they really need to do and taken tough actions that put them back in charge of their lives.

But a curious and embarrassing thing occurred in these sessions that oddly enough led to the creation of a new set of ideas and this book. At the beginning of each presentation we asked participants to identify at least one personal and one business dilemma. The promise was that by the end of the day they would understand their dilemmas differently, and more importantly, be in a better position to deal with them. So far so good. Unfortunately, very few people seemed to understand what we meant by a dilemma, and they would propose problems that seemed so far off the mark that we found ourselves routinely rejecting them. Eventually people would figure it out and come up with "better" suggestions, but it was clear that we were doing something wrong. How could smart and motivated people consistently misunderstand the key instruction about the main subject of the seminar? Even worse, what gave us the right and the nerve to invite them to our session and then reject their problems?

With a lot of head scratching and many post-seminar educational conversations with clients (often in a bar or airport lounge), it dawned on us that something about our model was simply too restrictive. Not all problems are dilemmas, and the inability to distinguish between types and levels of problem is itself one of the greatest barriers to solving them. If dilemmas are a

particular brand and level of problem, what then are the other levels? What makes them different? And so what?

This book answers these three questions.

Problems differ in two very important ways: complexity and uncertainty. As these two conditions increase, we move from decisions to problems to dilemmas. We *make* decisions, *solve* problems and *manage* and *exploit* dilemmas. That may sound simple, but the tough part is figuring out the nuances and implications so that we can do a better job of diagnosing problems and managing them effectively.

The distinctions that began in discussions over the last couple of years have grown and matured, with lots of opportunity for testing and refinement. In many ways, this book is the prequel to *The Power of the 2 x 2 Matrix*, allowing us to place dilemmas in a larger context and to make sense of the wider range of problems people face.

The book is organized around the three things you need to know to make the problem solving journey more understandable and successful: know the problem; know yourself, the problem solver; and know the tools and methods that are available to deal with each problem.

**Know the problem**

The first key is learning to recognize different kinds of problems and challenges. When we are able to distinguish between problems, we can make better choices about how to respond. Chapter One discusses the relevance of complexity and uncertainty to defining and solving problems, and to learning how to tell one kind of problem from another with precision.

**Know the problem solver**

The second key is self-knowledge: being aware of our problem solving talents, weaknesses and preferences. As the saying goes, when your only tool is a hammer, everything looks like a nail. The

prime fuel of personal development is insight. We need to be able to recognize habits and patterns that get in the way of clear thinking and effective problem solving. Chapter Two introduces a set of eight powerful psychological barriers to clear decision making. Appendix 1 looks at cognitive style as a major success factor and introduces a self-assessment model based on the work of Carl Jung.

**Know the tools and methods**

The third key is mastering a range of diverse problem solving tools, methods and principles that are suited to different kinds of challenges and outcomes. If a situation calls for a speedy decision and the options are clear, why explore alternative scenarios? Dilemmas on the other hand demand a different mindset and a more extensive and creative modeling process. The good news is that proven methods and useful advice abound, and paradoxically, they are not overly complex or difficult to master. Tools and methods are found in Chapters Two, Three, Four and Five as well as in the appendices at the back of the book.

I suggest you read the book with two of your own problems in mind, one personal and the other professional or technical in nature. You will find tools and exercises here that help you to sort out whether these are decisions, problems, or dilemmas, and a host of ways to approach them that are road-tested and easy to understand.

One personal problem I face is

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One professional or technical problem I face is

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This is a simple book built on a core observation about the nature and structure of problems. Most of us don't need more complicated approaches. The challenges we face in our lives are already complex enough; what we do need is better understanding that helps us to see more clearly and to act with conviction. That, more than anything, is the goal of this book.

Alex Lowy  
March, 2007



## Chapter 1

# The Problem Solving Hierarchy

The problem is not that there are problems.  
The problem is expecting otherwise and  
thinking that having problems is a problem.

~Theodore Rubin

Smooth seas do not make skillful sailors.

~African Proverb

ON A PARTICULARLY DISMAL afternoon in May of 1985 I entered my boss's office feeling the full weight of the world on my shoulders. At the time I was Director of Training & Development for the City of Toronto, and things in the training world were not going well at all. I was there to own up to the awful mess I'd created and to seek assistance -- if indeed anything could be done to salvage things. I was feeling doubly bad: incompetent about how I had mishandled things and let them progress to such a state, and guilty for now dragging the problems to my boss who was juggling many times my load.

Glumly I poured out my troubles, expecting at any moment to be admonished, upbraided or even worse, replaced. I had little doubt that I deserved it. Quite to the contrary though, when I finished, his response was a mix of understanding, support and advice that miraculously helped me to reframe the situation, transforming it from something impossible and unbearable to a challenge I could handle.

*“Alex, there are no big, insoluble problems. They often appear that way, but that’s more how they feel than what they really are. Let’s take a few breaths, step back, and break the problem down – see what’s really going on, what’s at the root of things, what needs to be done right away versus what can wait, and which parts of this mess are really other peoples’ problems, not ours.”*

After working together for an hour, I was back in charge of the situation, and over the following twenty-four hours I initiated a series of important actions and decisions to correct things. Not only were affairs once more on track, but I was enjoying myself again. What only hours earlier had felt like the worst nightmare imaginable was now stimulating and fun! How did he (or we) achieve this remarkable feat? The basic principles that guided him were simple and few. Together, they provide a fitting point of departure for the advice offered in the coming pages.

### **Take charge: don’t let problems control you**

I am not a big believer in patiently waiting for things to work themselves out, and don’t recommend it as a problem solving stance. Patience may be a virtue, but the passive mindset is deadly. We rarely sit in neutral; either we are moving towards or away, positive or negative, confident or fearful. Once the negative mindset is established, it becomes a part of the problem, often the most difficult one to dislodge.

### **Define the problem correctly**

Our propensity to tackle the wrong problem only increases with the perceived seriousness of the situation. If you are stuck on a problem, assume two things: the definition is probably incorrect, and you have somehow become part of what’s problematic. Break down to build up; synthesize to reframe; seek opinions to challenge faulty assumptions.

### **Separate emotions from facts**

Great problem solving calls upon rationality and feelings in equal measure. Together they bring content and context into true focus. Unfortunately, emotions can take over, distorting reality and influencing us unduly. This is obviously the case with negative emotions like fear and anxiety, but can also result from our hopes and expectations. We need to be able to see both with our emotions and beyond them.

### **Learn and apply problem solving methods that fit the situation**

One size does not fit all circumstances. Churchill’s unique character made him an ideal wartime leader but lackluster in peace. The ability to size up the moment and assume the most appropriate problem solving stance is essential as situations shift. Becoming proficient at a variety of problem solving methods gives you the confidence to choose the right approach rather than going with what feels natural and comfortable.

### **The importance of complexity and uncertainty**

Problems differ in many ways, so why would a single approach work every time? Of course, it doesn’t. As an analogy, think about what happens at the intake desk of a busy hospital emergency department. The first step upon arrival is an assessment of need called triage, derived from the French word, *trier*, meaning “to sort”. Patients are not treated equally or seen in order of arrival, because their needs are so diverse. To treat them alike would relegate those with urgent and life threatening problems to the

back of the line, waiting their turn like everyone else, and that just doesn't make for good medicine.

Triage follows rules and protocols that make the process more orderly and dependable. And the earlier in the screening process that an accurate triage is conducted, the more likely treatment will be successful. This often starts well before the patient arrives at a hospital. When, for example, an ambulance attendant sees that an accident victim has a serious head injury, she will immediately aim for the nearest facility with a trauma unit that can handle the case.

While the outcome may not always be as severe or immediate, the same principles of sorting and classifying apply to the problems we face in our lives. When you remove obvious differences in context, we're left with two major questions that shape and define problems: how complex are they, and what is the level of uncertainty? Answering these two questions directs us to the correct problem solving level, saving time and effort, and more importantly, increasing the odds that what we do will be beneficial. Let's take a moment to understand these two dimensions and why they are so important.

*Complexity* refers to the number, sensitivity and seriousness of interdependencies in a situation. My decision to choose the 405 or 407 bus in the morning affects very little else in my world. Deciding whether to drive or take the bus is somewhat more involved, since it affects whether my wife or children can use the family car. Being late complicates things even more, and when I throw in that I no longer enjoy my job, the complexity level takes a serious spike. As complexity rises, things tend to get more serious and difficult, and often require more sophisticated methods to resolve them.

Complexity is perhaps easier to understand in larger systems and where consequences are more severe. Scheduling a factory to meet the needs of hundreds of customers is complex, especially when those needs can vary on a weekly or even daily basis. Deciding which story to place on the front page of a newspaper is complex. Global warming and diminishing biodiversity are complex matters.

*Uncertainty* refers to the ability to control and predict two important sets of factors. These are the forces that shape and determine a situation, and the outcomes that result from our efforts. Referring to my earlier example, I can confidently predict the bus schedule, but I have a harder time knowing when other family members will need the car, and very little ability at all to predict what would happen if I quit my job.

The answers to these two questions – how complex is the problem and what is the level of uncertainty – tell you a great deal about the nature and urgency of what you are dealing with. As the two dimensions increase, the kind of problem you are facing changes, meaning you need a different approach. At the low end of each of the two dimensions are decisions – decisions should be made. At the next level up we encounter problems – problems need to be solved.<sup>1</sup> And at the high end of complexity and uncertainty we encounter dilemmas – dilemmas should be managed and exploited.

It sounds simple, but often we mix up the levels and try to solve dilemmas, manage problems or exploit decisions. Whatever the reasons may be for this, the effect is generally the same: delay, frustration and ineffectiveness. With a little instruction and practice, everyone is capable of conducting this kind of diagnosis quickly and accurately. It begins with understanding how the three levels differ and learning to apply a set of simple questions.

## What's the difference between decisions, problems and dilemmas?

**Decisions** – The simplest form of issue or challenge we face is choosing among known options where time is tight and there is low uncertainty about the options and the outcome. Taken from the Latin *decidere*, the word literally means to cut off. Do I take route a or b? Do I work the morning shift or the evening? Will I pick the green or blue ink pen? We make micro-decisions like these throughout the day, usually without really thinking about them.

They don't demand much deliberation and quite rightly fall below the level of conscious thought.

Decisions of this sort are easy because the best option is obvious or because the criteria are loose enough to make a range of available alternatives acceptable. For example, in choosing a snack, any of a number of possibilities will do the job. This principle lies behind advances in the field of artificial intelligence, which seeks out ways to exploit the "tolerance for imprecision".<sup>2</sup> What this basically means is that wherever feasible, we should use decision rules that allow for the lowest amount of specificity that will get the job done. The modular, "nomadic" furniture craze in the 1960s followed this principle by making it easy to reconfigure pieces that were light and fitted together in various combinations. Tolerance for imprecision not only makes deciding easier, but also builds in adaptability to changing conditions.

Decisions become tougher to make (harder to "cut off") when consequences are more important, and when there are strong emotional attachments. For example, deciding whether to get married or accept a new job can be difficult decisions because they involve serious commitment and may require you to give up more than in other situations.

When a decision feels so difficult that your data, options and criteria are not enough to help you make a choice, there's probably more going on. If you hit an impasse when making a decision, it's time to look inside yourself for emotional attachments or unarticulated views, and to seek opinions from trusted friends and advisors. If all these efforts don't lead to a decision that feels right, it probably means you are facing a problem or dilemma and you need to step up a level or two and apply a different set of problem solving methods.

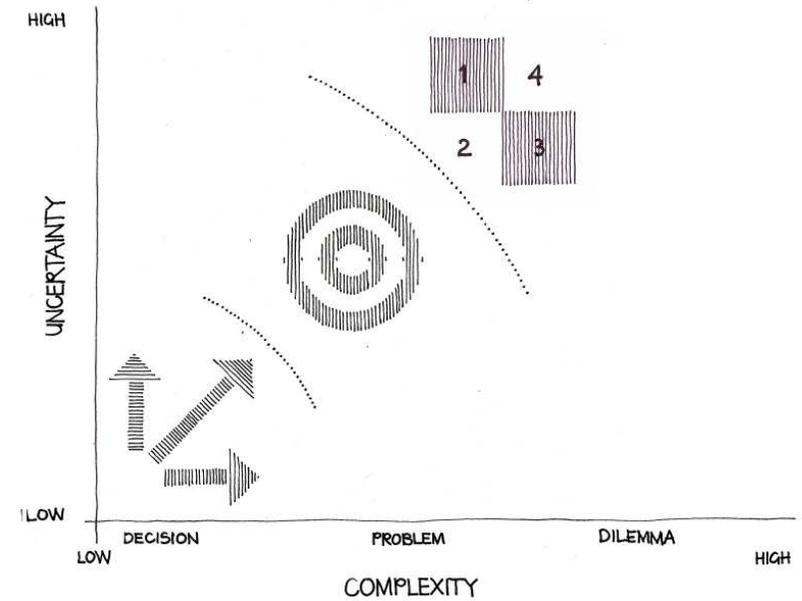


Figure 1.1. The Problem Hierarchy

**Problems** – Problems represent gaps or barriers to achieving outcomes that we value. With problems, we cannot choose from among known options because there are as yet no acceptable solutions. We have a "problem with" or a "problem to". The goal in problem solving is to eliminate or resolve the barrier. Approaches to solving problems involve varying degrees of rational and creative effort, and the ability to invoke both of these strategies as needed is the hallmark of an excellent problem solver.

Accuracy in problem definition is critical, and you get better results when you tackle underlying rather than superficial factors. In solving tough problems, it is useful to apply a systematic method that helps you to challenge assumptions and avoid blind spots. A famous example of overlooking a blind spot is the 1986 explosion of the Challenger space shuttle due to a faulty o-ring. The post hoc conclusion was that politics had over-ridden safety, and

had led scientists to minimize a known and documented danger. In effect, since they didn't acknowledge the problem, they took no steps to solve it, resulting in the death of the seven astronauts and a significant setback to space research

As with decisions, when problem solving efforts reach an impasse, this is a clue that you may be working at the wrong logical level. With problems, there are two types of impasse to watch out for: the inability to find an acceptable solution at all, and a series of apparently fine solutions that don't last. Time to check out if this is a decision you're avoiding or a dilemma you're trying to force-fit into a solution.

**Dilemmas** – When the conditions underlying a situation are complex and resolution is unlikely, you are facing a dilemma. Two examples of common dilemmas are choosing between short and long term benefits, and being guided by reason or one's gut. In each of these cases, one side is lost without the other. They are complementary. With dilemmas, there is no right answer. And unlike decisions and problems, there is no way of knowing in advance what the result will be of addressing a dilemma.

So why then do we deal with dilemmas at all? Because they are rich, compelling, legitimate, and often, unavoidable. Dilemmas can appear as impasses. By responding to the dilemma, we gain understanding and insight that makes constructive action possible. Conversely, when we ignore dilemmas, a bad situation usually gets worse, leaving people unprepared, frustrated and feeling powerless. You know you are dealing with a dilemma when repeated attempts at decision making and problem solving have failed. The way to tackle dilemmas is to investigate the forces that are in tension and causing pain or difficulty. Exploring these points of tension leads to better understanding and increases readiness for action.

<i>Level</i>	<i>Characteristics</i>	<i>Goal</i>	<i>Method</i>
<i>Decision</i>	<ul style="list-style-type: none"> <li><i>Options exist</i></li> <li><i>Criteria are known</i></li> <li><i>Becomes tougher when consequences are more important</i></li> <li><i>Time constraints</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Pick best fit</i></li> <li><i>Pick option you and others can live with best</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Frame decision</i></li> <li>• <i>Define options</i></li> <li>• <i>Clarify criteria</i></li> <li>• <i>Choose</i></li> <li>• <i>Examine subjective views to identify barriers to choosing</i></li> </ul>
<i>Problem</i>	<ul style="list-style-type: none"> <li><i>Presents a barrier to satisfaction or success</i></li> <li><i>Gap between current &amp; ideal state</i></li> <li><i>Problem is solvable</i></li> <li><i>Solution is not known</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Resolve or remove</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Define</i></li> <li>• <i>Redefine</i></li> <li>• <i>Generate options</i></li> <li>• <i>Synthesize</i></li> </ul>
<i>Dilemma</i>	<ul style="list-style-type: none"> <li><i>Persistent challenging or troubling conditions</i></li> <li><i>A situation that resists resolution</i></li> <li><i>The context is as important as the content of the issue</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Understand, learn, gain insight, manage, alter perspective or relationship</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Define core tension(s)</i></li> <li>• <i>Reframe, model &amp; explore alternative tensions &amp; their implications</i></li> <li>• <i>Transcend original constraints</i></li> </ul>

Figure 1.2. Summary of Decisions, Problems and Dilemmas

### Why bother? Does it really matter?

The difference between being an excellent problem solver and a poor one can mean the difference between a satisfying and successful life and one filled with missed opportunities and disappointment. Knowing how to recognize decisions, problems and dilemmas is an essential skill that makes it possible to select the right problem solving method and attitude to get the job done. It's akin to knowing which cutting tool to use for a construction job

or how to dress for an occasion. Getting it wrong may not kill you but it is costly and unnecessary. With a little practice, you can learn to tell the difference between the three levels and respond accordingly. Take a few minutes to work through the exercises in Appendix B to increase your understanding and sort through some issues and challenges of your own.

## ENDNOTES

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<sup>1</sup> Mirroring common usage, I sometimes use the word *problem* to describe that general category of situations which we find challenging and difficult. It also happens to be the best and possibly only term for a particular class of methods used to solve “them” (the language of problem solving is clearly problematic, if you get my point). Wherever possible then, I will use the phrase “issues and challenges” when referring to the general category that encompasses decisions, problems and dilemmas, and “problem” for the specific, actionable category of situations that we solve.

<sup>2</sup> This articulation of how to achieve fuzzy logic that emulates human thought appeared in R.E. Bellman and L.A. Zadeh’s 1970 paper “Decision-Making in a Fuzzy Environment,” *Management Science* 17(4) B141.