

# 1 Introduction

Uncertainty is not, in most circumstances, a good thing. We do not wish to be uncertain about whether we can pay our bills, uncertain of the affections of the people who matter to us, uncertain about our health, or uncertain about our job prospects. Businesses are always concerned about the management of risk; they seek ways to reduce uncertainty. At least in the developed world, people pay taxes mainly as a means of reducing uncertainty—the risk of invasion and conquest, the uncertainty of terrorism, the risks created by possible unemployment, by loss of income in old age, and by health crises. They top this off by devoting a portion of their income to insurance, pension plans, and savings, all attempts to reduce uncertainty in their lives.

Yet if the goal is a reduction in uncertainty, the reality is that we live in an uncertain and conditional universe. Even in apparently civilized countries, madmen may come to power and slaughter millions of their own citizens. Apparently sane leaders maintain arsenals capable of destroying whole cities at a blow. Despite the miracles of modern medicine, terrifying diseases can spring out of nowhere and devastate whole populations. Seemingly harmless practices—smoking, applying pesticides, drilling for undersea oil—can turn out to have devastating and

unexpected consequences. We may wind up cooking ourselves in our own industrial waste, or turning the oceans into sewers. For that matter, terrorists could get hold of a nuke, an asteroid impact could erase tetrapodal life from the planet, a nearby star could go supernova and subject us all to killing radiation, nanotechnology could turn us all into gray goo, and Jesus could return, smiting all sinners—and I can assure you that, by the standards of the people who think this last remotely possible, I certainly qualify as a sinner.

The world is in fact filled with terrifying uncertainty, and it is a tribute to the dauntless and objectively insane optimism of the human species that we, most of the time, are fairly cheerful about it.

But the reality is that we are faced with uncertainty throughout our lives—and that much of our effort is devoted to managing and ameliorating that **uncertainty**. Is it any wonder, then, that we have taken this aspect of our lives, and transformed it culturally, made a series of elaborate constructs that subject us to uncertainty—but in a fictive and nonthreatening way?

I'm talking about games, of course.

In the course of this book, I shall endeavor to persuade you that games **require uncertainty to hold our interest**, and that the **struggle to master uncertainty is central to the appeal of games**. I will explore the many sources of uncertainty in games of diverse sorts and come to some conclusions about how to categorize these different sources of uncertainty. Finally, I will suggest ways in which game designers who wish to design with intentionality, that is, to purposefully craft novel game experiences rather than implement a new skin for a well-understood game genre, can use an understanding of game uncertainty in its many forms to improve their designs.