

P R E F A C E

Many different forms are usefully discussed as “computer literature” or “electronic literature”: MUDs and MOOs, hypertext fiction, automatic story and poetry generators, and conversational programs (also called chatterbots), to name just a few. Many different sorts of cybertexts, electronic or not, present different texts to be read depending upon the actions of the reader: the Choose Your Own Adventure book, the systematic oracle, the box of pages that can be shuffled into any order and then read. This book is about one form, interactive fiction, which includes what has been called the “text game” or “text adventure” along with other works, some of them quite unusual, that cannot be easily classed as adventures or games. Such works are able to understand natural language input to some extent and, based on such input, to effect action in a systematic world that they simulate.

Specifically, the interactive fiction works considered here are those computer programs that display text, accept textual responses, and then display additional text in reaction to what has been typed (Jerz 2000a; Short 2001). The exchange between user and computer (textual, in the case considered here) continues until the person interacting terminates the program or reaches a conclusion.

For a work to be interactive fiction, as the term is understood by those who use it today, it must be able to react to input meaningfully. The component that analyzes natural language input in an interactive fiction

work is called the *parser*. A program is not interactive fiction if it simply prints the same series of texts, or a random series of texts, in response to input, or if it outputs some transformation of the input string without understanding that string. A textual work that offers an interface that does not accept natural language at times (e.g., it sometimes presents menus, or once in a while asks a question that is to be answered with y or n) can still be an interactive fiction work, however, as long as natural language is used in the normal framework for interaction. This aspect was singled out by literary critics early on as important in defining the form: “In the development of interactive fiction, the original ‘Adventure’ with its legion of imitators and successors is important because, for the first time, the game let the reader answer with words instead of numbers” (Niesz and Holland 1984, 114).

The setting of an interactive fiction work—whether it exists purely for exploration, functions mostly as a metaphorical table holding jigsaw-like puzzle challenges, or serves as an obviously novel location in which meaningful events play out—is more than a setting. It is a simulated *world*, which in practice is represented computationally in some sort of data structure or collection of objects. It is this simulated world that distinguishes a work of interactive fiction from a conversational character or from an expert system that employs natural language understanding. Even if the conversational character is drawn with literary care, even if the expert system operates on some fictional or fantastic domain that suggests a bizarre world or situation, such programs are not interactive fiction, since they do not simulate worlds in a way that allows the interactor to act and see the results of simulated actions within those worlds.

Since interactive fiction works are not best understood as electronic documents, no one should expect them to be like Web pages or other sorts of linked constructions. But they also are not understood well in terms of certain systems that accept text input and generate text, such as relational databases—systems in which queries generate reports from tables. Similarly, they are difficult to understand in terms of video games, since the few elements that they share with video games function quite differently in interactive fiction. They are unique programs, best understood in terms of their two essential components, the world model and the parser, which implement the two essential features of interactive fiction.

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The world model is typically implemented in the interactive fiction program as some type of graph or tree of structures of some sort (e.g., record, object, list) with associated procedures, methods, or functions (Graves 1987). It represents the physical environment of the interactive fiction and the things in that environment, including characters, any physical objects in the setting that can be manipulated or further examined in any way, and the player character. It also represents, and simulates, the physical laws of that “setting”—one reason this element is more appropriately called the interactive fiction world. The passage of time, the player character’s possible ways of progressing through the required tasks, the levels of awareness of different characters, and such things as the presence or absence of light in different areas are all modeled by this component.

The parser is that part of the program that accepts natural language input from the interactor and analyzes it. (“Parser” is used as a term for all components of the program that handle natural language input, including some components that are distinguished from parsers in natural language processing.) In the case of *Adventure*’s “two-word” parser, which only accepts input of the form “verb” or “verb noun,” determining the grammatical structure of the input is trivial. More complex sentences are accepted by other interactive fiction works. Such input can be compared to recognized structures by the parser, considering those objects that might possibly be referred to, and the likeliest match can then be accepted. Since the input text only needs to be interpreted in relation to the simulated world and the range of actions possible within that world, this analysis is tractable. Outside interactive fiction, even “go west” might mean any of several things (it could be, e.g., a suggestion that a young person explore new options, a cheer for an all-star team, or a euphemism for death), but in the specific domain of interactive fiction such input can be understood reliably and unambiguously.

The implementation of the world model and the parser can differ, and there is nothing about the definition of interactive fiction presented here that requires they actually be implemented as cleanly separated modules. It is still useful to distinguish these two “parts” of an interactive fiction program, however, corresponding as they do to the two major essential functions performed by an interactive fiction work. There are other ways to talk about the elements and functioning of an interactive fiction work, some of

PREFACE

which I detail in the book's first two chapters; these two are mentioned here since they are so closely related to the definition of the form.

The overall organization of this book is roughly chronological, with most chapters considering a certain era of interactive fiction. The subjects of chapters do overlap in time, and the book's earliest topics are from long before the first actual interactive fiction work was created. Chapter 1 introduces the form in a bit more detail while discussing its current place in electronic literature scholarship, then provides a short annotated transcript and a discussion of the elements of the form from the perspective of narratology. Chapter 2 deals with the most important and oldest ancestor of interactive fiction, the riddle, describing that form's history and the way in which its workings can help us understand interactive fiction. Chapter 3 discusses *Adventure* after looking at important predecessors to interactive fiction, including literary machines, *Dungeons and Dragons*, computer games, conversational computer programs, and SHRDLU. Chapter 4 considers the mainframe era and those games developed at universities in reaction to *Adventure*, with a focus on the most widely distributed and influential interactive fiction work from that time, *Zork*. The beginning of commercial interactive fiction for the personal computer is the subject of chapter 5, which deals mainly with the popular interactive fiction works of Infocom. Competing companies who produced interactive fiction works during the commercial era, including those outside the United States, are considered in chapter 6. Chapter 7 steps back in time to describe how development of "homebrew" interactive fiction began and how such development, along with the beginnings of an online community, resulted in new sorts of creative results during the 1990s. Finally, the influence that interactive fiction works and the interactive fiction form has had on other forms of literary and gaming production, digital and otherwise, is discussed in chapter 8, where some possibilities for the future of interactive fiction are also considered.

While the decision to focus on textual interactive fiction was undertaken thoughtfully, some of the boundaries of this discussion come not from careful consideration but from my own background, the context of my experiences, and my own limitations. I have tried to consider works from other places in the world, but I am American and have the perspective on interactive fiction that comes from being in the United States during the commercial era. I have experienced interactive fiction almost exclusively in

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English, and in this book I can do little more than admit that it is also written in other languages. As an interactive fiction author, I have used Inform to create works; for this reason or other reasons, I may have preferred Z-machine interactive fiction to that written in TADS or other systems when writing chapter 7, despite the existence of works of equal merit that have been developed using other systems. Nevertheless, one has to begin somewhere. This is the approach I can offer, one that I hope will be of use to scholars and teachers and also to today's community of interactive fiction authors and aficionados.

This book is not precisely an attempt at a survey (looking over the entire terrain), nor can it manage to be a comprehensive history (chronologically narrating every important event and explaining the causes of these events). It is intended instead as an approach, leading up to a richer experience of interactive fiction (for those familiar with the form already) or to a more enjoyable first experience of it (for those familiar with computing and literature but not yet aware of interactive fiction). The approach, in climbing terminology, is only the trail taken to reach the climb, which is what is really of interest. This book, then, has a rather anti-Platonic goal, in a certain sense: It seeks to provide a way into the cave and, for those who have been there already, to provide some new thoughts on how to better appreciate its exploration—in the hope that new types of wonder will be possible.