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Creating Personalities for Synthetic Actors

Towards Autonomous
Personality Agents



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Preface

Progress in computer animation has attained such a speed that computer-generated human faces and figures on ubiquitous screens will soon be indistinguishable from those of real humans. The potential both for scripted films and real-time interaction with users is enormous. However, in order to cope with this potential, these faces and figures must be guided by autonomous “personality agents”. But what is the current state of the art in this far less visible domain of research?

To answer this question, we decided to organise a two-day workshop which took place at the premises of the Austrian Research Institute for Artificial Intelligence in Vienna. To this workshop we invited scientists known for their work in this area, ranging from computer animation specialists, computer scientists, and specialists in AI, to psychologists and philosophers.

This book is the collection of the papers which were presented as first drafts at that occasion. The lively discussion was taped, transcribed, and sent to the participants. We are extremely grateful to them for the pains they took to consider the comments, to enhance their papers with new material, and to submit them on time. At least one author of each of the papers presented in this book was present at our workshop, with the sole exception of Barbara Hayes-Roth, who regrettably had already accepted other duties when the date of the event was set.

We want to thank all our colleagues at the Austrian Research Institute for Artificial Intelligence, especially Dr. Bernhard Pfahringer, who was not only very instrumental in the scientific preparation and organization of the workshop but also proposed its name, and thus the title of this book, and to Gerda Helscher, MA, for preparing the transcripts of the tape recordings and for her help in the finalization of this volume. Both Prof. Jörg Siekmann, one of the LNAI series editors, and Mr. Alfred Hofmann of Springer-Verlag were ideal partners in our endeavor.

We are grateful to Dr. Erhard Busek, then Federal Minister for Science and Research, for his support of an agent project of which the workshop was an integral part, and to Dr. René Fries from the same Ministry, who took great care to keep the project going. We hope we will get to be as grateful to Dr. Caspar Einem, now Federal Minister for Science and Transport, since we have applied to his Ministry for its financial support of a research project on the development of personality agents.

It is our hope that this book will serve as a useful guide to the different approaches to create personalities for synthetic actors and to stimulate future research in this promising field.

Vienna, Austria, January 1997

Robert Trappl and Paolo Petta

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