

A Linguistic Characterisation of Design in Text-Based Virtual Worlds

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Abstract

In this research, it is suggested that design in text-based virtual worlds can be identified as a series of interactions between users and the virtual environment, and that these interactions for design can be approached using a linguistic perspective.

The main assumption of this research is that a parallel can be drawn between the performance of design commands, and the one of speech acts in the physical world. Design in text-based virtual environments can then be articulated using a restricted set of speech acts, as design commands.

Virtual worlds, represented as spaces, can be constructed following an architectural design metaphor. This metaphor provides a framework for the organisation of virtual entity relationships, and for the choice of words used to design. A linguistic characterisation is presented, by means of design activities, prototypes and scenarios, which derive from the architectural design metaphor.

The characterisation of design is then validated by the analysis of an existing text-based virtual world.

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I discussed the themes treated in this thesis with a number of people, whom I wish to thank.

Unfortunately, I have never met most of these people in real life, neither do I know their real names: we only met in virtual worlds, through our *avatars*, and we never went beyond them (maybe, one of the advantages of virtual worlds). My simple way to thank these people is to report some of their comments throughout the text, keeping their nicknames unchanged, where I had permission to do so. Students of the Virtual Campus, and other “virtual” friends kept my attention on arising design problems, plus they were always happy to discuss general issues about life online; “anmore,” “anti,” and “sneep” in particular were a source of new ways of thinking about cyberspace.

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My Italian family, only geographically distant, recognised that even though it seemed very long, the step from Italy to Australia was worthwhile (and it was!). In particular, my sister Maria Luisa helped me getting together the courage, and the words, to apply for the PhD candidature.

Finally, my husband Justin Milne trusted and nurtured from the very beginning my efforts to complete this research, knowing that the issues I was dealing with were exciting and valuable, risky and pioneering. His love and intelligence cannot be reduced to a few words. Our son, Celso, will probably have a memory of his first year of life sitting on my lap, or on the floor playing with office toys, while my eyes are glued to the computer screen. I hope that this Ph.D. has not stolen much from his babyhood, and he will forgive me soon.

To Justin,
and to all those who think differently.

Table of Contents

Abstract	2
Preface	8
CHAPTER ONE. Introduction	10
1.1 Nature of the Work.....	11
1.2 Objectives	14
1.3 Acronyms and Special Words.....	15
1.4 Design as Organisation.....	17
1.5 Background for Language and Design Studies	18
1.5.1 Language Protocol Studies.....	19
1.5.2 Language and Spatial Representation	21
1.5.3 Computer-Mediated Communication Studies	24
1.5.4 An Example of Computer Language Design.....	27
1.6 The Virtual Campus	29
1.7 Anticipation of Findings.....	30
CHAPTER TWO. Online Text-Based Virtual Worlds	32
2.1 Online Communities Overview.....	33
2.2 The MUD and MOO family.....	37
2.2.1 The Linguistic Nature of MOOs.....	38
2.2.2 MOO Entities	39
2.2.3 Activities in MOOs.....	41
2.3 Constructive, Hierarchical and Community Aspects of MOOs.....	47
2.3.1 Constructive Aspects: Entity Description	47
2.3.2 Hierarchical Aspects: the Database Structure.....	49
2.3.3 Community Aspects: the LambdaMOO case	50
2.4 Design Register in MOOs.....	52
2.4.1 Language Tools for Virtual Worlds.....	54
2.4.2 Existing Commands for Design.....	56
2.5 Basic Examples of MOO Design	59
2.6 Summary.....	62
CHAPTER THREE. Linguistic Aspects for Design in Text-Based Virtual Worlds	64
3.1 Linguistic Studies and Philosophy of Language	65
3.2 Speech Act Theory	66
3.2.1 Speech Acts, Text-Based Virtual Worlds and Language Aspects	70
3.2.2 “Doing Things with Words” and Design Acts.....	73
3.2.3 Speech Acts and Computer Commands	74
3.2.4 Computer Commands for Design in Text-Based Virtual Worlds	76
3.3 Metaphors for Computer-Based Environments.....	77
3.3.1 Metaphors for Text-Based Virtual Worlds.....	79
3.3.2 Place Metaphors in MOOs	81
3.4 What is Different about Designing in Text-Based Virtual Worlds?.....	88
3.4.1 Matter	88
3.4.2 Coherence	89
3.4.3 Speed	91
3.4.4 Control.....	91
3.5 Basics for Design in Text-Based Virtual Worlds	93
3.6 A Characterisation of Design.....	100
3.6.1 Products	103
3.6.2 Design of Area Prototypes	105
3.6.3 Design of Things	108
3.6.4 Processes: Design Speech Acts	109
3.6.5 Syntax for Design Speech Acts	111
3.7 Summary.....	112
CHAPTER FOUR. The Virtual Campus	114
4.1 The Environment.....	115
4.2 Entity Design in the Virtual Campus.....	116
4.3 Design Prototypes in the Campus	119
4.3.1 Area prototypes	120
4.3.2 The \$classroom prototype	120
4.3.3 The \$office prototype.....	126

4.3.4 The \$social area prototype	127
4.3.5 The \$hall prototype.....	129
4.3.6 The \$building prototype.....	132
4.3.7 The \$library prototype	133
4.3.8 The \$mobile prototype.....	134
4.4 Design Speech Acts in the Campus.....	136
4.4.1 The @sketch command.....	136
4.4.2 The @refine command.....	139
4.4.3 The @<prototype> command.....	140
4.4.4 A container property: capacity.....	141
4.4.5 Adding a Reaction to a Room.....	144
4.5 The (A, R, Ref) Characterisation in Verbs and Properties	146
4.6 Observations on Design issues.....	153
4.7 Summary.....	154
CHAPTER FIVE. Perspectives	156
5.1 Overview	156
5.2 Contributions	157
5.3 Other Perspectives for Design in Text-Based Virtual Worlds.....	158
5.4 Open Issues and Research Directions.....	159
5.5 Final Considerations.....	161
BIBLIOGRAPHY.....	162
APPENDICES.....	171
List of Appendices Enclosed in the CDROM.....	171
APPENDIX A. Acronyms and Glossary.....	172
PAPER: On the Linguistic Nature of Cyberspace and Virtual Communities	174

List of Diagrams, Scripts, and Tables

Diagram 1. The relationship between entities of computer and physical environments.....	13
Script 1. Two guest participants	42
Script 2. Dialogue between two users, with emoting	43
Script 3. Several participants and room reactions.....	43
Script 4. Dialogue between a user and a bot.....	44
Script 5. Use of a special entity	44
Script 6. Actions of sitting and standing	45
Script 7. A user enters and leaves a room.....	46
Script 8. Place description.....	48
Script 9. Entity description.....	48
Script 10. LambdaMOO room description.....	51
Script 11. Dialogue from MediaMOO	54
Script 12. Recorded conversation from the Virtual Campus	55
Script 13. The code of verb @describe on entity #6, from the LambdaCore database.....	58
Script 14. Two descriptions of tables, from the Virtual Campus	59
Diagram 2. The Root Class hierarchy	60
Script 15. Room with special features.....	61
Script 16. Section of code from a non compiled MOO server (LambdaMOO 1.8.0p5).....	72
Script 17. From a conversation in the Virtual Campus	72
Table 1: The seven components: speech acts and computer commands	74
Diagram 3. The planning and production of virtual entities	95
Diagram 4. Characterisation of virtual entities	100
Diagram 5. Design tools and their relationships.....	101
Table 2. Area prototypes and their contents	106
Table 3. Area prototypes: activities and reactions	107
Table 4. The Generic Sketchpad (A, R, Ref).....	118
Table 5. Correspondence between verbs and A and R of the \$classroom area prototype.....	125
Script 18. An office in the Virtual Campus	127
Script 19. Another office in the Virtual Campus	127
Script 20. A park area in the Campus	129
Script 21. A meeting room in the Campus	129
Script 22. The Main Hall in the Virtual Campus	131
Script 23. The Resources Room in the Virtual Campus.....	132
Script 24. The Objects Library in the Virtual Campus.....	134
Script 25. Two examples of \$mobile areas.....	135
Script 26. The @sketch command output	138
Script 27. Example of the @office command output	141
Script 28. How to change the capacity of a box.....	142
Script 29. The verb #3:enterfunc	144
Table 6. (A, R, Ref) for (p, v) in the generic thing (#5)	148
Table 7. (A, R, Ref) for (p, v) in a room prototype	152
Script 30. The verb \$classroom:writeblackboard.....	152

Preface

This dissertation is organised into five chapters, and they should be read in sequential order: the writing explains step by step complex aspects of design in virtual environments, each explanation becoming a given. Due to the novelty of most topics, concepts are sometimes repeated under different circumstances, in various parts of the same chapter, as well as in different chapters. Each repetition should work as a reinforcement, extension, further explanation, and reminder, to give the reader a comprehensive view of what is intended with those concepts. The five chapters should also be considered linked to one another by the common linguistic perspective, especially when topics seem to be coming from very different areas of study and points of view.

The whole dissertation should be approached with the assumption that this is the first time that design in text-based virtual worlds is studied in terms of linguistic performance, and that the attempt to develop a perspective for design in virtual worlds is a new challenge for architectural research.

The first chapter, the introduction, gives a layout of what the dissertation is going to present, points out the main assumptions, hypotheses, and claims, and tries to largely define the areas of interest. In this chapter, theories on language that form the general background of applied linguistics are also presented. However, these theories are not used in the development of the design characterisation presented later, but they are needed for the completeness of the literature framework.

The second chapter gives a detailed overview of what text-based virtual worlds are, of their linguistic aspects, of the kinds of activities performed, and some extended examples of generic situations. In that chapter, I also introduce a specific family of

text-based virtual worlds, which are suitable examples to study how language can perform design activities.

The third chapter presents the analogy between linguistic theories and text-based virtual worlds. In particular, speech acts and computer commands are put side by side to build the perspective on how language is useful for design purposes. Modalities for design in text-based virtual worlds are introduced as design commands, scenarios, and numerous examples of developed entities. Some characteristics of designing with language in text-based virtual worlds are also outlined in this chapter. This chapter is central for the development of the design characterisation based on a linguistic perspective.

The fourth chapter shows the characterisation applied to a “real” case: the *Virtual Campus*, a text-based virtual world running at the University of Sydney. The proposed characterisation of design is superimposed on the Virtual Campus, in order to prove its validity. In that chapter, I also give examples of how the various components of the triad can be and have been implemented.

The final chapter, five, summarises the whole research, and indicates perspectives, unresolved issues, and further studies in this design research area.