

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.

Acknowledgments

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.

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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.